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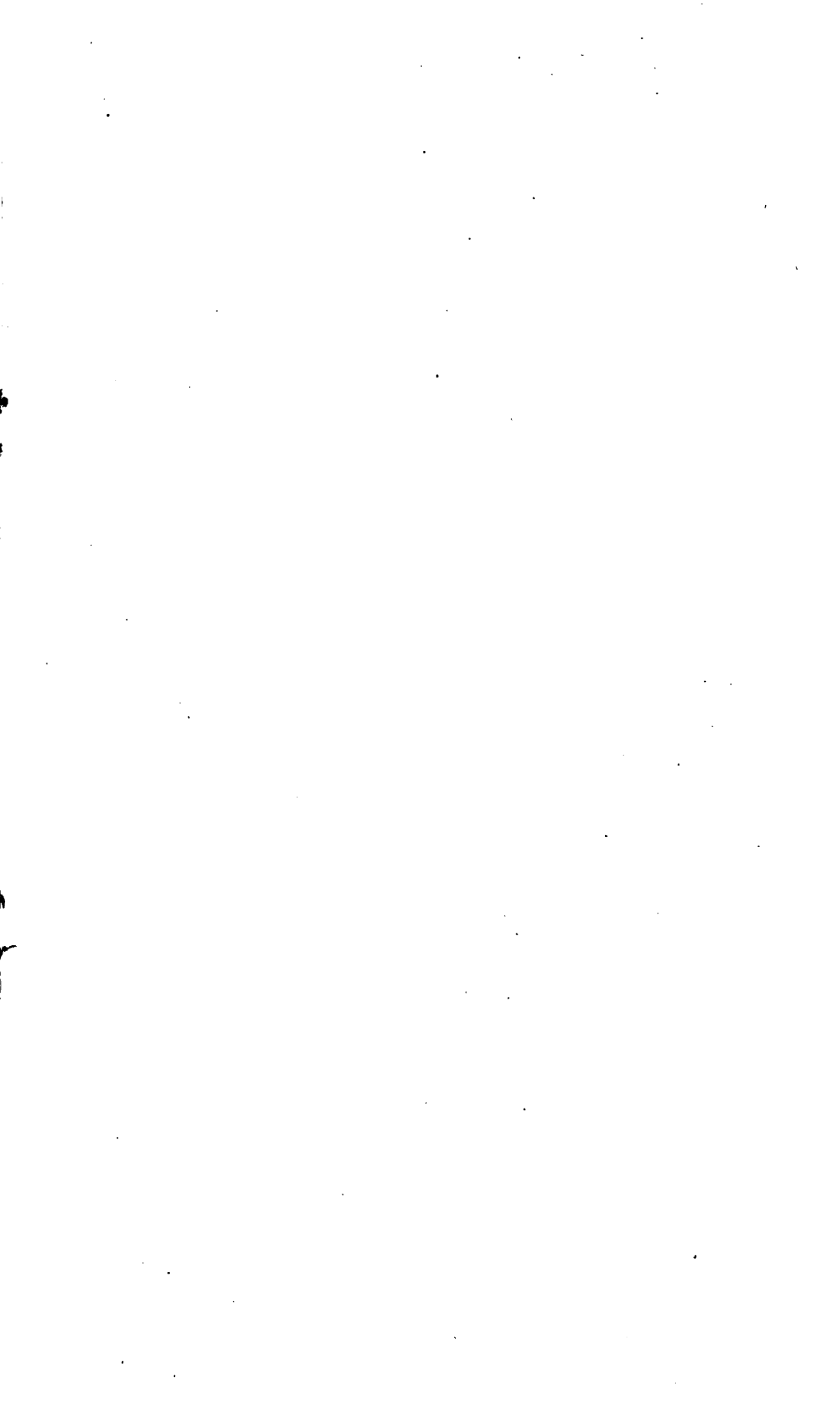
The Hospital for Dr. W. A. Dewey
18 June 1897

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TWENTY-FIFTH ANNUAL REPORT

OF THE

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MIDDLETOWN

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STATE HOMEOPATHIC HOSPITAL

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AT

MIDDLETOWN, N. Y.

TRANSMITTED TO THE LEGISLATURE FEBRUARY, 1896.

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IN ASSEMBLY,

FEBRUARY, 1896.

TWENTY-FIFTH ANNUAL REPORT

OF THE

MIDDLETOWN STATE HOMEOPATHIC HOSPITAL AT MIDDLETOWN, N. Y.

MIDDLETOWN, N. Y., *December 5, 1895.*

To the Honorable the Speaker of the Assembly:

SIR.—I have the honor to transmit to you the Twenty-fifth Annual Report of the Middletown State Homeopathic Hospital and beg that you will present the same to the Legislature,

GRINNELL BURT,
President.



MIDDLETOWN STATE HOMEOPATHIC HOSPITAL.

OFFICERS.

TRUSTEES.

HON. GRINNELL BURT *President*, Warwick, N. Y.
HON. JAMES G. GRAHAM *Vice-President*, Newburgh, N. Y.
GEORGE H. DECKER, Esq. *Secretary*, Middletown, N. Y.
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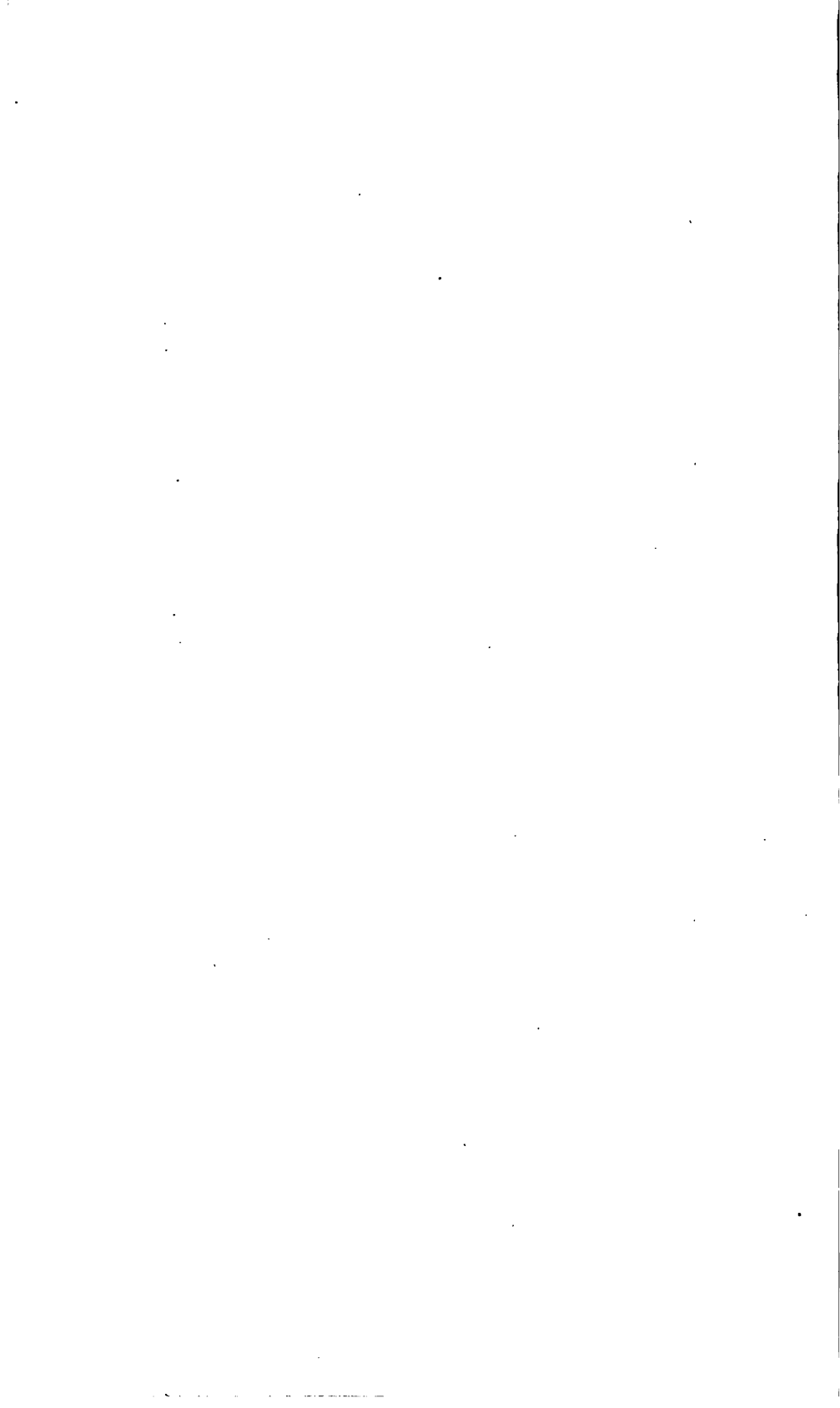
OFFICERS OF THE HOSPITAL.

SELDEN H. TALCOTT, A. M., M. D., PH. D. *Medical Supt.*—
GEORGE ALLEN, A. M., M. D. *First Asst. Physician.*—
C. SPENCER KINNEY, M. D. *Second Asst. Physician.*—
DANIEL H. ARTHUR, A. M., M. D. *Third Asst. Physician.*—
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CLARA BARRUS, M. D. *Woman Physician.*—
JOHN COCHRAN *Steward.*
HENRY J. LEONARD *Asst. Steward.*

ALES HRDLICKA, M. D. *Interne.*

SUPERVISORS.

MR. W. E. COOK, MISS D. W. COMSTOCK,
MRS. W. E. COOK, MISS IRENE BENJAMIN.



TRUSTEES' REPORT.

To the Legislature of the State of New York :

In compliance with the provisions of chapter 446, Laws of 1874, we herewith present to the law-making body of this State the twenty-fifth annual report of the Middletown State Homœopathic Hospital. It records the experiences of the year ending September 30, 1895.

In addition to the trustees' report there will be found in this document the report of the treasurer, the report of the medical superintendent, medical essays by the members of the hospital staff, the usual list of statistical tables, the bureau of information for those seeking to obtain admission for patients, and the index.

In the trustees' report there will be found the business reports of the various special departments of the hospital, namely, reports from the farmer, gardener, florist, engineer, carpenter, laundryman, and housekeeper.

Visitations and inspections.—During the past year fifty-two visits have been made by the trustees, either singly or in committee combinations, or in regular meetings by the entire board.

Visitations have been made by the various members unexpectedly, and at all hours of the day and evening. We have found during these visitations that the officers and employes were, as a rule, faithful in the performance of duty, as well as enthusiastic in bestowing appropriate care upon the mental invalids committed to their charge. We are glad, therefore, to record our high appreciation of the work performed by our officers and employes during another year.

While the financial reward is very moderate to many of our workers, we feel certain that each honest toiler reaps an unmeasured compensation when he feels the self-satisfaction which springs from a noble deed well performed. Likewise, pleasure comes to each employe when the fact is apparent that his or her efforts are justly appreciated by those who have observed their actions at the post of duty.

The Commission in Lunacy visited the institution several times during the year, and during their inspections they made some valuable suggestions. These suggestions have been carried out as far as the necessary funds secured would permit.

Committees.—The following is a list of the names of each committee :

Committee upon estimates—Macardell, Stansbury.

Auditing committee—Stansbury, Vanamee, Hayes.

Finance committee—Devoe, Decker.

Farm and building committee—Clark, Hayes, Macardell.

Visiting committee—Wetmore, Graham, Allen, Decker.

Law committee—Decker, Devoe, Vanamee.

The title of the committee indicates the special duty to be performed. It has been ascertained that the duties of the trustees may be best and most expeditiously performed by having the work thoroughly subdivided, and by having a special committee for each especial task.

It is the duty of the committee upon estimates to examine the estimates each month to be sent to the Commission in Lunacy, and to advise the superintendent and steward as to the amounts to be included in such estimates.

It is the duty of the auditing committee to examine and approve all bills for supplies furnished to the hospital, and to direct the payment thereof.

The finance committee fixes the wages of employes, and enters into and executes all contracts other than those pertaining to the duties of the farm and building committee. This committee also

directs the deposit of moneys belonging to the hospital, and examines and audits the accounts of the treasurer.

The farm and building committee has general charge and direction of the farm, and to this committee are referred all questions relating to the location, plans and erection of new buildings, or extension, alteration or repairs of those already built; the purchase, sale and exchange of lands; the laying out, improvement or ornamentation of the grounds, and the employment of architects and workmen needed in such operations; the purchase and disposition of all animals, utensils, seed and other supplies needed for the working of the farm; and the storage of all the products, and the sale of all surplus products and supplies.

The visiting committee shall cause one of its members to visit the hospital at least once in each month, to examine as to the condition, care and treatment of the patients therein.

To the law committee are referred all questions pertaining to the rights of patients, the duties of employes, and the collection of dues to the hospital from delinquents. During the past year there was collected from delinquents, under the direction of this committee, \$851.17.

Formerly there were but four committees; now there are five. By adding to the number of committees, the general work is performed in a more systematic manner, and the ends desired are by this means the more readily obtained.

Recent laws.—During the last year laws in behalf of the insane were passed as follows:

(1) An act to appropriate money for the support and maintenance of the insane. (Chapter 693, page 463.)

(2) An act in relation to the appointment of a committee of the person and property of a lunatic, idiot, or habitual drunkard. (Chapter 824, page 650.)

(3) An act to protect the lives of the inmates of public buildings of State institutions, and to protect said buildings against destruction by fire. (Chapter 535, page 314.)

(4) An act providing for the appointment of policemen in the State hospitals for the insane. (Chapter 885, page 660.)

(5) An act to provide for the discharge of insane patients from State hospitals. (Chapter 172, page 95.)

(6) An act to protect human life by the construction of iron fire escapes on the outside of all State hospital buildings over two stories high. (Chapter 138, page 220.)

As soon as these laws were brought to the notice of the trustees, action was taken as promptly as possible. In some instances, we could only submit estimates, and await the action of the State Commission in Lunacy.

Monthly estimates are made for maintenance in accordance with chapter 693.

The appointment of committees to care for the person and property of insane patients has been attended to as provided in chapter 824.

Estimates were submitted for additional fire protection; and all rubbish has been removed from the basements and attics of the institution in compliance with chapter 535.

At the June meeting the superintendent reported the manner in which patients should be discharged, and by resolution of the board the superintendent was authorized to comply with the provisions of chapter 172.

When the act providing for fire escapes on all buildings over two stories high was considered, the superintendent reported that the provisions of the law were already complied with at the Middletown hospital, and that every building over two stories high was provided with the necessary fire escapes.

Fire protection.—This matter has already received careful and continuous attention from the trustees and the medical superintendent.

ent during the past nineteen years. While we are already provided with iron stairways in compliance with the law, we believe it our duty to state that if a better fire escape than that which we now have could be procured, it would be an act of wisdom on the part of the State to secure the best. An iron stairway, protected by a wire screen, may admit of escape from a burning building if the flames are not coming out of windows below the third or fourth story. But if the fire were in the lower part of the building, and pouring out of a window or doorway into the space occupied by the iron stairway and wire screen, then it would be almost impossible to pass through the flames without serious injury to the patients or their protectors.

We understand that there is a fire escape constructed on a *cylindrico-spiral* plan — that is, a large, steel plate cylinder is set up on the side of the building, and within the cylinder is a spiral slide, down which a person can pass with rapidity and safety. This is called the Kirker-Bender fire escape, and is made by the Dow Wire Works Company, of Louisville, Ky.

Dr. H. K. Pusey, Superintendent of the Central Kentucky Asylum for the Insane, Lakeland, Ky., writes, concerning this escape, the following :

“For celerity, ease and safety of escape nothing else compares with them. Persons entering the escape from each floor at the same time never come in contact or collide. In tests I have seen sixty-eight persons come through one of these escapes in one minute. Our patients are always ready for a ride through the fire escape. We have never had one injured or hurt in these drills.

“This fire escape practically renders the taller stories as safe as the ground floors. As their operation becomes understood, I feel sure that their application will become general.”

We should either substitute escapes which are so highly commended by those who have them in practical use, or we should have iron doors on the outside of all doorways or windows leading to the fire escapes, so that we may shut back the flames, and keep them out of the fire escapes in case of necessity.

Our present facilities for putting out fire in case of an accident may be enumerated as follows:

(1) A general system of automatic fire sprinklers throughout the entire establishment, except in the main building, where perforated pipes are so situated as to flood the halls when necessary.

(2) Hose on every floor, and in the basements of all the large buildings.

(3) Portable fire extinguishers on each floor of every building.

(4) Hand-grenades on every floor of each building.

(5) We have on each hall fire-pails containing chemical solution, for the purpose of extinguishing fire. We have, also, pails kept filled with water, to be used in case of fire.

(6) We keep throughout the basements of all the buildings barrels filled with water, with pails hanging near them, to be used in extinguishing fire.

(7) Water in bath-tubs on the wards at night.

The law requires now that there shall be six portable fire extinguishers on each floor of each building throughout the establishment. The procuring of this additional supply has been under consideration by the Commissioners in Lunacy, also by the trustees and superintendents of the State hospitals. We have sent an estimate to the State Commission in Lunacy for the necessary number of portable fire extinguishers to comply with the law.

Agricultural, Mechanical, and Other Reports.

We present herewith the reports of the various departments of the institution, namely, the farmer's, the gardener's, the florist's, the engineer's, the carpenter's, the laundryman's, and the housekeeper's.

Farmer's report.—The farm reports the following as products of the farm during the year:

Apples, barrels	50
Beef, pounds.....	2,460
Beef hides.....	4
Calves sold.....	33

Calves skins.....	7
Cider, gallons.....	450
Hay, tons.....	120
Milk, quarts.....	54,082
Oats, bushels.....	150
Pork, pounds.....	28,843
Pigs sold.....	8
Potatoes, bushels.....	539
Straw, oat, tons.....	3½
Turnips, bushels.....	100
Veal, pounds.....	647

The following has been accomplished on the farm during the year:

October, 1894. Working at coal trestle; picking apples; filling in around vegetable cellar with coal ashes; butchering; repairing floors in piggery; drawing stone and ashes for coal switch; unloading cars of potatoes, and putting them in cellar.

November, 1894. Raking and drawing leaves from grounds; drawing freight, coal, coal ashes, and stone; butchering; taking cider apples to mill; working at sewers; clearing snow off walks; drawing manure.

December, 1894. Digging for water pipe to supply automatic fire extinguishers for Annex No. 2; laying and digging for blow-off pipes, boiler-house; butchering; drawing manure, coal, coal ashes and freight; working at sewers.

January, 1895. Taking patients riding; cleaning out ice house; harvesting ice, 1,894 tons; covering ice with salt hay; cleaning walks; drawing manure; butchering; drawing coal ashes, coal and freight.

February, 1895. Taking patients riding; drawing coal and ashes; cleaning walks; running snow plow; drawing freight; cutting and stacking ice; drawing manure; cleaning and oiling harness; butchering.

March, 1895. Butchering; cleaning walks and drives; drawing ashes, coal and manure; drawing freight; unloading flour.

April, 1895. Plowing garden; grading lawns; working at sewers; drawing ashes in woods; butchering; plowing for and sowing oats; seeding with grass; picking and drawing stone from oat field; plowing for potatoes, and planting same.

May, 1895. Plowing for and planting fodder corn; picking stone; drawing ashes and grading lawn; plowing garden, drawing manure on same; working at sewers; cutting and setting posts for laundry yard; making new sewer connection at kitchen.

June, 1895. Plowing and cultivating corn, potatoes and garden; hoeing corn and potatoes; working some in hay; digging up and relaying blow-off pipe from boilers; drawing freight.

July, 1895. Haying; working corn and potatoes; working team in garden; working at sewers; cutting bushes; drawing gravel; picking and drawing twenty-five loads of small stone for filling under cement floor in machine shop.

August, 1895. Cutting and drawing bushes and weeds; harvesting oats; picking and drawing 140 loads of small stone for filling under basement and cement floors, Pavilions Nos. 1 and 2; plowing for and sowing turnips; drawing gravel for cement floors.

September, 1895. Harvesting fodder corn; plowing for and sowing rye, seven acres; seeding some with grass; picking and drawing stone and drawing gravel for cement floors in Nurses' Homes; cutting bushes; ditching; cutting poles; repairing fences and gates; drawing garden truck; working at sewers.

New dairy.—Forty cows and one bull have been purchased to replace the animals that were killed on account of their being infected with tuberculosis. The dairy cows are now all healthy.

Gardener's report.—The following is a report of the garden produce:

Asparagus, bunches	891
Beans, string and lima, bushels	223
Beets, bushels	175
Cabbage, heads	10,114
Carrots, bushels	66
Cauliflower, heads	374
Celery, heads	13,446
Corn, sweet, ears	27,130
Cucumbers, bushels	240
Currants and raspberries, quarts	1,239
Grapes, bushels	48
Lettuce, bushels	534
Lettuce, heads	6,475
Onions, green, bushels	191

Onions, dry, bushels	445
Parsnips, bushels	150
Pears, bushels.....	7
Peas, bushels.....	133
Radishes, bushels	67
Rhubarb, bushels	39
Salsify, bushels	25
Squash, summer and winter	947
Tomatoes, bushels	845
Turnips, bushels.....	300

Florist's report.— During the season 25,000 plants have been put out on the grounds. Roses, carnations, lilliums, hyacinths, chrysanthemums, violets, etc., have been grown for cut flowers; also, palms and other ornamental plants for decorating the hospitals and wards.

Roads have been kept in order from day to day; likewise the grounds, lawns, beds and walks. The assistance, however, is not enough to keep them in the best of order.

Engineer's report.— The engineer and his assistants during the past year have succeeded, as far as limited help would allow, in keeping everything in their charge in a reasonable state of repair. Eight boilers have been generally and thoroughly overhauled, including the brick work. The new Hogan boiler has been overhauled, and is now one of the greatest and best and most economical steam-makers we have ever seen. New expansion joints have been added to the subway on the summer steam pipes; and also a new Mason pressure-reducing valve was put on to the summer steam pipes for the purpose of reducing the pressure on the entire heating system of the hospital, which is supplied by these pipes. All expansion joints in both the summer and winter steam pipes have been repacked, while the entire steam-heating system has been kept under continuous surveillance and in good repair.

The kitchen cooking apparatus has received needed repairs, as have also the steam pipes of this department. The ice-machine has been put in excellent running order. New coils have been added

to the hot-water boilers. All necessary repairs have been attended to in the departments of plumbing and steam fitting. The electric-light plant has been run with care, and kept constantly in order.

Carpenter's report.—The carpenter reports the following new work :

New siding, floor and sink in farm cottage.

Roof of farm cottage repaired.

Eight new tables for wards.

Five new step-ladders for the wards.

One new room finished off in attic of Talcott Hall.

Twenty-seven pairs of steps for windows leading to fire escapes..

New sash-cords in twenty-seven windows leading to fire escapes, and windows rehung.

A new swinging window on fire escape in attic of Talcott Hall.

New covers on bread troughs in bake shop.

New floors in three water sections in Pavilion No. 1.

New wood work on four bath-tubs.

Eleven new seats for water-closets.

New seats in thirty-three settees for the wards.

New seats in sixty-four chairs for the wards.

New corridor from kitchen to deep well-house.

New shelving in dry-goods store-room.

New shelving for books.

New stationary wardrobes in kitchen dormitory.

New porch on engineer's house.

New dumb waiter on cross hall, Pavilion No. 2.

New plate glass in doors of Annex No. 1.

New closet in basement of Nurses' Home.

Eleven new screens for hospitals.

New plank walk from Talcott Hall to Nurses' Home.

Two new boxes for moulding soap in laundry.

New wire partitions in water-sections, Pavilion No. 1.

New closet in dynamo room.

New floor in truck house.

Aside from the above new work, the carpenter has kept in repair chairs, furniture, doors, windows, and glass in halls and outbuildings belonging to the department, as necessity demanded.

Laundryman's report.—During the past year 1,257,695 pieces have been washed and ironed or mangled, and returned to the wards. The number of pieces washed indicates the vast amount of “next-to-Godliness” work accomplished by the head laundryman and his assistants.

Housekeeper's report.—The following is a report of the canning and pickling department:

Blackberries, quarts	8
Cherries, quarts	5
Currant jelly, pounds	100
Grapes, quarts	29
Grape jelly, pounds	24
Green peppers, quarts	16
Huckleberries, quarts	17
Mixed pickles, gallons	90
Mustard pickles, quarts	56
Peaches, quarts	84
Peach pickles, quarts	16
Pears, quarts	10
Pie-plant, quarts	52
Pineapple, quarts	104
Ripe cucumber, quarts	24
Raspberries, red, quarts	9
Raspberries, black, quarts	22
Small cucumbers, quarts	62
Salt cucumbers, gallons	500
Tomato catsup, quarts	1,259
Tomatoes, canned, quarts	5,335

Projected improvements.—(1.) An addition is needed to the laundry building, and this should be fifty feet square. The laundry house is very much crowded with machinery at the present time, and there is not sufficient room for the women to iron the clothing. When we have a proper addition to this building we can give employment to more of the patients, and we can get work finished in less time, and in a more satisfactory manner.

The new machinery allowed for the laundry consists of a new washing machine, a new sterilizer, and a new mangle. The latter will take clothes direct from the wringer and dry and iron them by passing once through the machine.

(2.) Preliminary plans and specifications have been made for a tower to be attached to Pavilion No. 2, and to contain on the first floor a smoking room adjacent to the billiard room, and on the second, third and fourth floors spray baths, water-closets, slop sinks, urinals, etc., as they may be needed. The present day-room block, which is attached to Pavilion No. 2, is now used as a hospital, and there is but one small bath tub and one water-closet for the accommodation of thirty-five patients on each of the second, third and fourth floors. Therefore, a tower containing baths and water-closets is an imperative necessity, in order to make this day-room block suitable and sanitary for the care of hospital patients.

By the erection of this tower and the removal of the old bath tub and water-closet which cumber one corner of the large front hospital rooms, we will have room for six more patients; and by utilizing the third floor in Annex No. 1, we will have additional room for eight more patients. This makes a total increase of fourteen beds to our general capacity, and calculating upon the basis of five hundred dollars per bed, this additional capacity will admit of the erection of the tower, because we believe that the work may be entirely completed for a little less than seven thousand dollars.

(3.) Plans have been outlined for the construction of a series of shops to be attached to the westerly end of the Amusement Hall. These shops will accommodate the tailors, and shoemakers, and chair-makers, and matmakers. They will be attached directly to the shops of the engineer and carpenter, and in that way the system of affording skilled labor to those who are able to work will be systematically completed. We can not give work to those who are able to toil unless we have a suitable place for them to work.

(4.) We need another building for men to correspond with the



ENTRANCE TO GROUNDS.

building already constructed for women, and which is known as Talcott Hall. We also need a hospital building for women, where recent and curable cases may receive special care, with a view to effecting speedy and permanent recoveries.

(5.) In some institutions there have been erected congregate dining-rooms, and there are those who strongly favor them in preference to the plan of having a small and homelike dining-room on each ward. It is probable that a certain proportion of chronic cases who are unlikely to recover may be economically and satisfactorily fed in a large congregate dining-room; but a portion of the small dining-rooms should be retained for the accommodation of those who are too feeble to travel to a large dining-room, or for those who are too excitable to appear with advantage in society.

The medical superintendent informs us that a congregate dining-room might be constructed over the large reservoir in the rear of the main building. By placing the building there, the water in the reservoir could be kept more free from leaves and dust than at present. An elevator corridor could run from the rear angle of the corridors now leading from the main building to the pavilions, and thus easy access could be obtained. Also the distance from the proposed site to the kitchen is short, and an elevated track could carry the food from the place where it is cooked to the place where it is eaten with great facility.

A dining-room should be a pleasant and inviting structure, and if it was erected where proposed, it would shut off the rather unsightly view now presented by the old boiler-house.

If a congregate dining-room were erected we could convert into dormitories or hospital wards the present dining-rooms in Pavilion No. 1 on the second and third floors. In these two rooms we could probably put sixteen beds, eight in each room. In Talcott Hall the two dining-rooms would probably accommodate thirty-five beds. In the second, third and fourth floors of Pavilion No. 2 we could probably put thirty beds. This would make an additional accommoda-

tion, within the present structures, for eighty-one beds, and at \$500 per bed, that would call for the sum of forty thousand and five hundred (\$40,500) dollars from the construction fund of the State. This sum would complete a very comfortable and very substantial, large and commodious congregate dining-room, which could be made to accommodate about 400 or 500 patients.

(6.) In addition to the means already obtained for fire protection at this hospital, we need a general system of electric fire alarms. When a fire breaks out in any part of a community like this, the entire population should be immediately apprised of the fact, in order that a speedy escape from the perils of fire could be readily made. The system of electric fire alarms in a State hospital should be similar to that which has been adopted by the most enterprising cities of our commonwealth.

(7.) We also need additional oak carpeting to cover the floors which are not yet finished with this material.

(8.) Steel ceilings should also be placed in every ward or large room throughout the institution.

(9.) The cement floors in the basements should be repaired and renewed wherever they are out of repair.

(10.) New carpets, furniture and utensils should be provided wherever needed.

Inventory.—The usual annual inventory was taken as soon after October 1, 1895, as practicable, and duly filed in the safe of the treasurer.

Local architects.—Whenever any new buildings are to be erected, or changes or improvements are to be made in the old buildings, there should be a local architect to draught the plans and make the specifications.

Under the present law, the State Architect lives in the city of Albany, and it is impossible for him to formulate all the primary plans which are needed for the erection of suitable buildings upon the various State hospital grounds. Therefore, we would suggest

that the present law relative to architects should be repealed, and a new law should be substituted therefor, providing that local architects shall perform the necessary duties in preparing the plans and specifications in the future. After plans and specifications have been duly prepared by local architects, then they should be forwarded to the State Architect for examination, suggestions and approval.

IN MEMORIAM.

On February 2, 1895, Hon. M. D. Stivers, who served as secretary of this board for more than twenty years, was suddenly called to his eternal reward. We desire to inscribe upon the pages of this report our profound appreciation of the many and valuable services rendered to this institution during a long and useful life by our departed friend.

In making record of our high regard for this earnest and sincere worker in the field of philanthropy, we can find no more fitting words than those spoken on the occasion of his death by Counselor Vanamee :

“How often has he, whose death we mourn to-day, pronounced words of generous praise upon both the living and the dead — words that have been borne upon every breeze by white-winged messengers of the press, carrying comfort and delight into many a home and to many a heart. He never stinted praise where he thought it was deserved. It gave him joy to publicly commend sterling virtue, or struggling talent. It delighted him to advance ambitious merit, and to assist expanding powers to their full development. Especially to many a young man was his timely, noble encouragement a source of strength, and hope, and confidence, and success.

“And now, he who so often commended others is deaf to all our expressions of commendation and affection. He who so often sympathized with and befriended others, is beyond the need of sympathy, and the reach of friendship. Even in life it is peculiarly the lot of the journalist to create the fame of others, while securing but slight measure of recognition for himself. But to his experience this general truth did not apply. His was a life singularly, uni-

formly and cumulatively successful—crowned with honors and rewards which attest the purity of his character, the versatility of his talents, and the greatness of his abilities. The people at large were swift to recognize in him the public-spirited citizen, the self-sacrificing patriot, the wise publicist, the sagacious leader, the incorruptible official, the steadfast friend, the honorable neighbor, the consummate gentleman. The confidence, the admiration and the gratitude of the public followed him at every step in his career, and found expression in conferring upon him every personal, professional and political distinction that could possibly be crowded into a single, busy life.

“Alas, that it should have been *so* busy! We can not repress the haunting suggestion that, if he had spared himself, he might have been with us still.

“But, if he was to fall, it was fitting that he should fall amid the scenes and the excitements that he loved so well—the fever and the rush of the daily journal. It was fitting that he should fall by the side of those sons who had been his trusted companions in all the work of his later years. His home and his heart were in that journal which he had labored so zealously to establish, to embellish and to enrich, for the sake of those dear to him, and there could be no more appropriate abode in which to take his leave of earth, or in which to let his last gaze rest on earthly things.

“Yes, it was better so. We, his friends, are glad to-day that he was at least spared the pain of parting and the anguish of despair. He died as he lived—brave, buoyant, hopeful, courageous to the last.”

Many tributes to the memory of Mr. Stivers were pronounced; among these were fitting and earnest words by President Burt and several members of the board of trustees.

New appointment.—Hon. Wm. K. Stansbury, mayor of the city of Middletown, was duly appointed by the Governor and confirmed by the Senate to succeed Hon. M. D. Stivers, deceased.

In conclusion, we desire to state again our appreciation of those who have wrought at this hospital for the comfort and cure of the unfortunate insane. We ask the members of the Legislature to consider the means and measures which have been employed, and to

furnish all the hospitals for the insane in this State with the necessary funds to continue the benevolent work already so happily inaugurated.

Very respectfully submitted.

GRINNELL BURT,

President.

(2.)

TREASURER'S REPORT.

Maintenance Account.

Receipts for the year ending October 1, 1895.

Balance on hand October 1, 1894.....	\$8,713 87	
From State treasury for maintenance,	121,688 01	
From private patients for board.....	73,220 67	
From reimbursing patients for board,	16,534 55	
From all other sources.....	1,695 75	
Total receipts for year.....		\$221,852 85

Disbursements.

For officers' salaries	\$16,991 67	
For wages	71,397 28	
For provisions and stores	80,868 22	
For ordinary repairs.....	1,001 18	
For farm and grounds.....	3,554 69	
For clothing	1,815 01	
For furniture and bedding	3,238 55	
For books and stationery.....	977 65	
For fuel and light	23,949 21	
For medical supplies	2,252 81	
For miscellaneous expenses.....	7,041 89	
For transportation of patients.....	1,166 10	
Total disbursements during the year.....		214,254 26
Balance on hand October 1, 1895		\$7,598 59

Old General Fund.

Balance on hand October 1, 1894....	\$2,436 75	
Received from First National Bank, interest.....	131 41	
		\$2,568 16

Disbursements.

Vouchers paid during year.....	1,750 00	
Balance on hand October 1, 1896.....	\$818 16	

Special Funds. Appropriations, Laws of 1893 and 1894.

Receipts.

Balance on hand October 1, 1894....	\$6,321 22	
From Comptroller, State Treasury for extraordinary improvements, etc...	20,526 44	
Total		\$26,847 66

Disbursements.

Paid vouchers during year.....	23,584 96	
Balance on hand October 1, 1895.....	\$3,262 70	

Special Funds. Apportionments by State Commission in Lunacy, Chapter 693, Laws of 1895.

Receipts.

From State Treasury	\$3,004 20	
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Disbursements.

Vouchers paid during year	1,271 00	
Balance on hand October 1, 1895.....	\$1,733 20	

Recapitulation.

Total balance of cash on hand October 1, 1894	\$17,471 84	
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Receipts.

Maintenance fund.....	\$213,138 98	
Old general fund.....	131 41	
Special funds, 1893 and 1894.....	20,526 44	
Special funds, chapter 693, laws of 1895	3,004 20	236,801 03
Total.....		\$254,272 87

Disbursements.

Maintenance fund.....	\$214,254 26	
Old general fund.....	1,750 00	
Special funds, 1893 and 1894	23,584 96	
Special funds, chapter 693, laws of 1895.....	1,271 00	
		<hr/>
Total disbursements.....		240,860 22
		<hr/>
Total balance of cash on hand October 1, 1895		\$13,412 65
		<hr/> <hr/>

Balances.

Maintenance fund.....	\$7,598 59	
Old general fund.....	818 16	
Special funds, 1893 and 1894	3,262 70	
Special funds, chapter 693 of 1895.....	1,733 20	
		<hr/>
Total.....	\$13,412 65	
		<hr/> <hr/>

Approved by the Board of Trustees at the annual meeting held
December 5, 1895.



PAVILION NO. 2 AND MAIN BUILDING.



(3.)

SUPERINTENDENT'S REPORT.

To the Board of Trustees :

GENTLEMEN — I have the honor to present herewith my nineteenth annual report as Medical Superintendent of this hospital, with the request that it be incorporated in the twenty-fifth annual report of the institution.

In compliance with our usual custom, we offer, first of all, a table showing the admissions, discharges, whole number treated, and general results attained during the year ending September 30, 1895 :

TABLE NO. 1.

Showing movements of population for the year ending September 30, 1895.

	Men.	Women.	Total.
Remaining October 1, 1894.....	520	527	1,047
Admitted during the year ending September 30, 1895	146	132	278
Total number under treatment during the year	666	659	1,325
Daily average population	539 ²² / ₃₆₅	558 ²⁷ / ₃₆₅	1,097 ¹¹⁸ / ₃₆₅
Capacity of institution.....	500	510	1,024
Discharged during the year:			
As recovered.....	48	58	106
As not recovered	12	8	20
As not insane*	1	1	2
As dead	51	31	82
Whole number discharged during year ..	112	98	210
Remaining October 1, 1895	554	561	1,115

*One idiot. One chronic nephritis.

Percentage of Recoveries.

On whole number admitted.....	38.12
On whole number discharged.....	50.47
On average daily population.....	9.66
On whole number treated.....	8.00

Percentage of Deaths.

On whole number admitted.....	29.14
On whole number discharged.....	39.04
On daily average population.....	7.47
On whole number treated.....	6.18

The foregoing table gives, in brief synopsis, the history of the work performed during another twelve months.

A considerable number of aged and feeble patients have passed away, owing to conditions which are inevitable. There seems to be a growing tendency in the community to place the aged, the enfeebled, the worn-out and useless and uncompanionable wrecks of life in a public hospital for care and treatment. Sometimes a little more patience and perseverance on the part of friends at home would prevent an unnecessary increase of the hospital death rate and another shadow upon some proud family name.

The hospital that wins a reputation for kindness and good care to the patients is sure to receive moribund cases that would be retained at home but for the expectation and belief that possibly a cure may be effected at the hospital as a last resort, or improved care may be given at least. Hence, when the friends get nervous, and the attending physician is in a despairing mood, a hurried consultation is held, and the dying man is favored with a farewell trip from his quiet residence to an overcrowded ward. Such things have been talked about and written about, and yet this useless and expensive, and frequently agonizing, procedure is continued and oft repeated.

During the past year twenty-four patients have died who were in the hospital less than three months. This constitutes about thirty per cent of all who died within the year.

One hundred and six recovered, and were returned in health and happiness to their friends, and their usual occupations. Nothing is more inspiring to the physician and nurse than to see a patient slowly clamber up from the slough of despond to the hills of health ; or to see the excitable maniac come down from the clouds of an over-wrought imagination, to settle once more upon the 'delectable heights of normal mental equipoise. We have been favored with an inspiration of this kind about once every three days during the past year, and we shall be yet more thankful when we can behold a happy recovery and feel its inspiration every day during the entire year.

Examination of Patients.

An examination scheme.— In order to fully understand the nature and tendencies of each individual case, I have requested my interne, Dr. Hrdlicka, to compile and prepare a *scheme* which would be comprehensive enough to touch upon and disclose all the characteristics, and idiosyncrasies, and mal-environments, and pathological tendencies of each admitted case. The examination paper thus prepared is, as follows :

Name..... ; civil condition..... ;
 occupation..... ; birth of (country)..... ;

Family history :

(1) How large a family does the patient come from ?.....
 Is he the first or last born ?..... Number of his brothers
 and sisters dead..... ; causes of their death.....
 State of parents' health.....
 Cause of death, if deceased.....

(2) Is there now, or has there ever been any member of the family afflicted with any form of nervous disorder, or insanity ? If so, at what age, and under what circumstances ?.....

(3) Have any relatives of the patient ever committed suicide, immorality, transgression of the law, or any kind of eccentricity ?

(4) Was any member of the relation addicted to drunkenness or the abuse of drugs?

(5) Inquiries about the occurrence, among relatives, of idiocy, imbecility, cretinism, myxœdema, sudden death, convulsions, deafness or dumbness (cong.), inborn physical deficiencies, or irregularities

(6) Scrofula, tuberculosis.....

(7) Syphilis

(8) Were the parents or grandparents closely blood related?....
.....Great or disproportionate age at marriage?.....

(9) The state of mother at conception and during pregnancy, with regard to diseases, injuries, worries, shocks, over-exertion.....

(10) Whom of the parents does the patient resemble?.....

(a) Physically.....

(b) Mentally

The condition, with regard to the above questions, of the patient's own family.....

Patient's history:

(11) Inquire as to the gravity of delivery; as to the appearance of nightly terrors, sphincter weakness, or convulsions in infancy and early childhood.....

(12) Were there any abnormalities, as to manner and kind, of the child's cutting teeth, starting to walk or speak?.....

(13) Diseases of childhood and their consequence

(14) School: Time of beginning..... extent.....
manner of learningsubjects preferred.....

(15) Time of puberty.....changes accompanying it

(16) Sexual instincts; time, manner.; has it been satisfied; in what manner.....; appearance of hatred of the opposite sex.....; any abnormalities in this respect in any member of the family?.....

- (17) States of constitution preceding and following puberty?
- (18) Marriage; time ; any abnormalities? ; conception
- (19) Have any of the following diseases affected the patient? :
- Typhoid fever
- Rheumatism
- Malarial fevers
- Influenza
- Meningitis
- Insolation
- Severe injuries of the head
- Chlorosis or anaemia
- Protracted digestive troubles
- Scrofula, tuberculosis in any form
- Syphilis
- Skin diseases, especially those accompanied with itching
- Any peculiarities during their course
- Any consequences
- (20) Has the patient been ever much subject to any vaso-motor disturbances?
- (21) Were ever any abnormalities of any of the special senses observed?
- (22) Intolerance of alcohol, smoking or drugs
- (23) Headaches — situation, kind
- (24) Neuralgias
- (25) Twitches of muscles, tremors
- (26) General disposition and its changes
- (27) Character :
- Steady
- Egotistic
- Reckless
- Pious
- Honest
- (28) Was the patient envious ; hateful ; revengeful ; phlegmatic ; personally careless ; of loose morals?
- (29) Was the patient addicted to play (gambling)
- drink ; women?

- (30) Condition of intellect ?.....
 (31) Any sexual weakness or abnormalities ?.....

(32) Women:

- Menses
 Gynaecological diseases or injuries.....
 Number and frequency of pregnancies.....

- (33) Any special signs of mental degeneration ?.....

History of the patient's mental trouble:

- (34) Number of attack.....
 (35) Character of previous attacks.....
 (36) The supposed causes.....
 (37) Has the development of the present attack been sudden
 or gradual?.....
 (38) The symptoms noticed in their order of appearance.....
 (39) Taedium vitae.....
 Attempts at suicide.....
 Tendencies.....

Status praesens:

- (40) Height.....
 (41) Weight.....
 (42) State of nutrition.....
 (43) State of blood supply.....
 (44) Condition of the skin.....
 (45) Form of the skull.....
 (46) Measurements.

- Circumference.....
 Occ. prot.-nasal root.....
 Ear—chin—ear.....
 Ear—forehead—ear.....
 Ear—ear.....
 Ear—greatest expans—ear.....

D's:

- Occip. prot.—nasal root.....
 Occip. prot.—chin.....
 Ear—ear.....
 Separation of malars.....

- Separation of madib. angles.....
- (47) Signs of physical degeneration.....
- (48) Color of eyes.....
- (49) Color of hair.....
- (50) Temperature.....
- (51) Pulse.....
- (52) Respiration.....
- (53) Tongue.....
- (54) Condition of teeth.....
- (55) Condition of the mucous membrane of the upper respiratory cavities.....
- (56) Tests of :
- Sight.....
- Hearing.....
- Taste.....
- Smell.....
- (57) Tests of sensibility.....
- (58) Reflexes:
- Irideal (*a*) for light.....
- Irideal (*b*) for accommodation.....
- Patellar.....
- Other reflexes.....
- (59) Motor functions.....
- (60) Secretory functions:
- Salivation.....
- Digestive secretions.....
- Sebaceous secretions.....
- (61) Excretions:
- Sweat.....
- Bowels.....
- Urine:
- Color.....
- Consistency.....
- Odor.....
- Reaction.....
- Spec. gravity.....
- Abnormal.....

(62) Physical examination :

General inspection —

- of body
- of genitals

Thoracic organs :

- Heart
- Lungs

Abdominal organs :

- Liver
- Spleen
- Stomach
- Intestines

Pelvic organs :

- Uterus
- Adnexa

(63) Holding of the body

(64) Expression

(65) Look

(66) Behavior

(67) Conditions of sleep

- Dreams

- Abnormal sensation on awakening

(68) Physical examination :

(a) Disposition ; conditions affecting it

(b) Tendencies

(c) Impulses

(d) Ideation

- Fixed ideas, delusions

(e) Psychical sensibility

(f) Psychical endurance

(g) Power of attention

(h) Self-control

(i) Intellectual properties (reason, logic, invention)

(j) Comprehension

(k) Memory

(l) Desires

(m) Powers of affection

- (*n*) Moral sentiments.....
 (*o*) Aesthetic sentiments.....
 (*p*) Morbid fears.....
 (*q*) Illusions.....
 (*r*) Hallucinations.....
 Signature of the patient.....

Of course there may be additions and variations to the foregoing examination scheme. By patient perseverance, and repeated interviews with those who have known the patient, and observed his appearance, speech and action, we gather and tabulate such histories as may enable us not only to understand the case, but likewise prescribe and direct such treatment as may most surely tend to physical recuperation and growth, and consequent return to mental health.

Each individual case needs individualized care. Each case needs directions and prescriptions which are most likely to promote his recovery. It frequently happens in the recovering of cases that educational growth must be instituted, or evil habits checked, or self-restraining and controlling will power stimulated, or physical development inaugurated. Each case is a study that requires time and reflection to understand, and a profoundly sympathetic and intelligent purpose to treat.

We present the examination scheme as an outline of the work which ought to be done in obtaining, first of all, a comprehensive idea of the individual case as it has existed during a life-time, and through the varying and mysterious mazes of ancestral influence, abnormal growth, or pathological degeneration.

Short history blank.—For elaborate and critical work, the preceding history form is valuable. For every day work in the care of a large number of the insane, our medical staff has prepared a brief historical chart, which is very satisfactory, as a general rule, and it is as follows :

Name, date, age.

Married, single, widowed.

Number of children, living, dead, age of youngest.

Nativity.

Time in United States.

Name and nativity of father.

Maiden name and nativity of mother.
Habits, of father.
Habits, of mother.
Cause of death, of father.
Cause of death, of mother.
Occupation.
Religion.
Education, none, reads only, common school, academic, collegiate,
unknown.
Habits, temperate, intemperate, sexually, liquor, drugs.
Natural.
Exalted.
Depressed.
Condition, natural, exalted, depressed, apathetic, suspicious, filthy,
profane, obscene, noisy, restless.
Tendencies, homicidal, suicidal, criminal, destructive.
Heredity, paternal, maternal.
Present physical condition, strong, fair, feeble.
Menstruation.
Pulse.
Tongue.
Temperature.
Eyes, light, medium, dark.
Pupils, normal, dilated, contracted, irregular.
Bowels, normal, constipated, loose.
Appetite, good, fair, refuses food.
Speech, none, answers questions, coherent, incoherent, voluble,
thick, garrulous.
Height, weight, color of hair, gait.
Heart, lungs, skin.
Number of admission here.
Marks, deformities, injuries, etc.
Other hospitals.
Number of attack.
Accompanying diseases.
Remote cause.
Exciting cause.
Diagnosis.
Stage.
Brought by.

Brought from.

Private, public, price per week.

Transportation expenses.

Condition of clothing.

Body cleanliness.

Bond.

Home address.

Correspondent.

Received by.

Time.

Sent to ward.

Note.....

Pathological conditions.—The pathological conditions which exist in the various forms of insanity are always interesting to the student of medicine, and yet comparatively little has been written upon the subject of pathology in the brains of the insane. That which has been written is scattered in a desultory way throughout many volumes of works upon mental disorders. My interne has, under my directions, compiled a list of the more prominent pathological states, and I herewith present them in this report under the head :

Pathological Table of Insanities.

	Meninges.	Brain (cerebrum).
Mania, Acute.....	Strong hyperæmia; serous infiltrations; sanguine extravasations.	At times nuclear proliferation, or diffuse, localized (most often to layers) inflammation and softening.
Mania, [Chronica.....	Thickenings and cloudiness, especially of the pia; adhesions along the med. sinus; variously localized congestions.	Atrophy, more or less, of the cortex; softenings; blood products (hematine, hematosine) in lymph spaces; fatty and pigmentary degenerations, and atrophy of some cells.
Delirium, *Acute.....	Congestions, especially of pia, particularly in the region of the middle cerebral art.; whitish infiltrations along the blood vessels of the pia; small effusions; adhesions of pia to cortex; œdema of pia.	Amethyst spots of congestion; sanguine extravasations; vascular points disseminated over and through the cortex; blood vessels turgescient, accumulations of granular elements in their walls, and around these in the brain tissue. Augmentation of the nuclei of neuroglia. Deformation of nerve cells. Granular degeneration of nerve elements; some fatty changes.
Melancholia.....	Adhesions, especially along the median sinus, between the dura and pia (ch.m.); pia cloudy, especially around the Rolandic fissure	Ischaemia; vascular changes with diminution in calibre.
Paranoia.....	Cloudiness of pia; intermembranous adhesions.	Structural irregularities; slight atrophies or hypertrophies.
Epileptic Insanity...	Hyperæmias; congestions; superficial ecchymoses, especially in pia; adhesions, both mutual and with the cortex, especially along the median sinus; chronic meningitis; tumors of the membranes.	Sinuses and veins engorged; cortex injected; vascular points abundant; congestions of other parts of the brain; anomalies of hemispheres (right often larger) or convolutions; chronic meningo-encephalitis; hypertrophic sclerosis of the convolutions; sclerotic, non vascular induration of neuroglia; induration of cornu ammonis and olivary bodies; vascular and perivascular alterations of the cortex; lobar atrophic sclerosis of vascular origin; vascular and sclerotic alterations of the medulla.
General Paresis.....	Dura mater: congestion (at beginning); shrunk; thinned or thickened, pale; adhesions to the skull along the sagittal suture; vascular derangements, from simple congestion to pachymeningitis hemorrhagica; osteoides frequent; adhesions inter membranes, especially along the median sinus; arachnoid and pia cloudy to opalescent, especially anteriorly to the Rolandic fissure, and along the blood vessels; dilated, sinuous, engorged; intimate adherences, disseminated, as a rule, with the cortex, especially over the frontal lobes, never within the furrows; diffuse capillary extravasations in the soft membranes; meningeal fluids augmented (post mortem) Microscopical: Signs of chronic inflammation.	Diffuse softening. Wherever this exists, adhesions between the cortex and the pia; on separating these, superficial erosions result; most numerous over the frontal lobes; no part immune. The whole brain, but especially the anterior parts, more or less atrophied; convolutions deformed, meagre; cortex generally darker; minute hemorrhages in gray matter. Ventricular liquid generally augmented. Ependym of the ventricles covered with fine granulations. Microscopical: Lesions diffuse, especially over the frontal lobes; cortex attacked in all its elements; neuroglia in excess, multiplication of the diverse cellular layers; atrophy and disappearance of large numbers of the nerve cells; lesions of the blood vessels, which are more numerous, and surrounded with small cells and leucocytes.

Pathological Table of Insanities.—(Continued).

	Meninges.	Brain (cerebrum).
General Paresis.....		<p>Blood vessels: Small arterioles mostly affected; lumen diminished, cavity distended with red corpuscles; walls thickened and infiltrated with many small cells; hyaline, mucoid or colloid degeneration, exudation of blood into perivascular spaces.</p> <p>Lymphatics: Amassments of white and red corpuscles; infiltration of the walls; neoplasms, button-like, found often on the blood vessels in the earlier stages.</p> <p>Cells: Alterations very diverse and irregular; some cells considerably enlarged, in a state of granular infiltration or cloudy swelling; others diminished in size, pigmented, atrophied. Various stages of regressive metamorphosis. Pericellular spaces enlarged, and invaded often by large, nuclear elements.</p>
Dementia Terminal..	<p>Dura mater: Adhesion to the skull, thickenings; osteoides.</p> <p>Arachnoid and pia-opacities, thickenings, infiltration, oedema.</p> <p>Intermembraneous adhesions, especially along the median line, and over the anterior and superior parietal convolutions.</p>	<p>Fibres: Tangential fibres destroyed; among the first lesions, both medullated and non-medullated fibres attacked.</p> <p>Neuroglia: Excessive arborification; proportional increase gives the granular appearance to the ependym of the ventricles; proliferation of nuclei; deformation of cells.</p> <p>White substance: Degeneration and disappearance of varying number of fibres; alteration of blood and lymph vessels similar to that of cortex; infiltration by round cells, especially between the white and gray matter, and around the blood vessels.</p> <p>Cerebellum, basal ganglia: lesions similar, lighter.</p> <p>Medulla: Principally alteration of the ependym of fourth ventricle.</p> <p>Spinal cord: Combined scleroses; tabetic lesions.</p> <p>Entire lesion: Diffuse, atrophic, primitively vascular and interstitial, later parenchymatous encephalitis, with super-added meningitis.</p>
Dementia Terminal..	<p>Signs of old effusions.</p> <p>Enlarged, sinuous vessels; atheroma.</p> <p>Meningeal fluids augmented (chronic).</p>	<p>Chronic ischaemia.</p> <p>Atheromatous and other vascular changes.</p> <p>Atrophies, general and localized, especially of the cortex; scleroses; softening; pigmentation of the gray matter. General increase of neuroglia. Various forms and degrees of degeneration.</p> <p>Traces of old blood effusions.</p> <p>White substance of dirty color, porous, tough; fibres degenerated in various proportion.</p> <p>Ventricles: Chronic inflammation of ependym. Anomalies: Dilations or constrictions, adherences of the walls; fluids augmented.</p>

Pathological Table of Insanities.—(Concluded).

	Meninges.	Brain (cerebrum).
Dementia Senilis.....	Opacities of the pia; inter-membraneous adhesions; thickenings of dura; osseous formations in same.	Vascular changes predominant, especially atheroma. Ischæmia, congestion, hemorrhages. Softening of brain substance. Pigmentation; atrophies.



PAVILION No. 2.

The Effects of Climate on Mental Disorders.

All persons are affected, more or less, by the climate in which they live. Climatic conditions sometimes favor the growth and continuance of health, and sometimes they impel the inception and development of disease.

There are stimulating climates, and sedative climates. There are climates and seasons in which untimely humidities breed physical and mental disasters, unless they are counteracted or antidoted by suitable protective means. There are climates which are dry and mild, and which favor a continuance of life even among consumptives, and those whose health has been impaired by exposures to the rigors of a changeable and irritating climate.

In considering the effects of climate upon those who suffer from mental disorders, we must take into account a vast variety of conditions which are associated or connected with the climate itself. In a cool climate the tendencies to undue exertion are very great. In a warm, sunny climate the people become indolent, lazy, inactive, and consequently they do not put any undue wear upon either their physical or mental structures. The diseases which afflict them are the diseases of sluggishness and of congested engorgements.

In considering the effects of climate, we must likewise consider not only the effects of toil or laziness, but also the effects of diet. In a cold climate, a hot, stimulating diet seems desirable, and this, when it is freely indulged in, brings a series of engorging and engulfing dangers.

In looking over those portions of the earth which might be called the dangerous areas to mental invalids, we find that probably the largest proportion of insanity is located in the middle or northern portions of the temperate zone.

It is asserted that insanity is a disease which has become most commonly prevalent in these modern times. Among the ancient Egyptians, insanity was known, but there were no hospitals for the insane, and the only treatment applied to the occasional maniac was music, and this was afforded in the temples and groves of those ancient people.

In the old Roman empire there was but little of insanity,

although the people were fierce, warlike and tumultuous in the exercise of passion. Even in ancient Athens — the classical Boston of those olden times — there were very few against whom the charge was brought, "Much learning hath made thee mad."

In all those countries which touch upon the coast of the Mediterranean, and whose cities and suburbs teemed with a multitudinous throng, there was scarcely enough of insanity to attract the attention of the current historian. But in later years the drift and tendency of immigration have been toward the north and west. The Asiatic and Teutonic races drift westward and northward through Germany and Scandinavia, while the Caucasian, the Celt and the Anglo-Saxon have captured France, Great Britain and the United States.

The result of this general march, from warm, sunny and relaxing climates to those which are invigorating, stimulating or irritating, has been the development and increase of brain disease and mental disorder of every hue and variety.

When this drift of immigration passes so far to the north as to reach beyond the lines of the highest human activity, then we find that the percentage of insanity decreases.

In Norway, which is an extremely bleak, cold and ambition-restraining climate, there are about only 1,800 insane patients among a population of over 2,000,000 of people. That is, about 900 to the million. In this State of New York, which may be regarded as one of the centres of the temperate zone, we have only about 6,000,000 of people, and more than 20,000 insane; that is, more than 3,000 lunatics to every million of the population. Of course, the percentage of insanity in this State is increased to a considerable extent by the immigration of weak and helpless and hopeless foreigners. Many of our insane are simply the driftwood debris, set afloat by astute, monarchial administrations, for the purpose of relieving the old countries of their fossils and their burdens.

Those who are useless in their old-time homes are encouraged to seek a new Golconda in the bright and golden west. New York receives at first the bulk of these migratory installments of human beings, and while the more active and restless and ambitious ele-

ments of this mass seek homes in the west, the weak and the insane are left to be cared for in or near the city of New York.

But, after making a reasonable allowance for those insane who come to this State from foreign shores, we feel quite sure that the percentage of insanity among those who are to the "manor born" is greater than that which is found in the population of Norway.

Still further we may state that the inhabitants of Iceland (which is a more cold and forbidding climate than Norway) are seldom afflicted with severe mental disease.

Again, the denizens of Greenland who subsist largely upon the oil and fat of sea animals, live quietly without ambition, and without a resultant madness.

We find, according to the most recent statistics, that in New England — the home of the brightest mentality that has been developed in this country, outside of New York — there is one insane person to every 375 of the population. In this State there is one insane person to every 400 of the population; in Pennsylvania, one to 450; in Virginia, one to 500; in the Carolinas, one to 700; and in Florida there is only one insane person to 1,100 of the general population.

It seems to me that this tabulated statement goes to prove that the stimulating properties of a temperate climate (temperate during the spring, summer and fall, and villianously exasperating during the winter, as it is in New England) tends, not only to the development of strong intellectual powers, but likewise to the inception and increase of dangers from mental disease.

As we move south, even in these modern times of activity and achievement, we find a gradual diminution of insanity; and while many correlative conditions might be suggested as tending to a decrease of this disease, yet, after all, we believe that the crowning cause of mental equipoise in Florida is due to the enervating, inactive, ambition-dispelling effects of the soft and salubrious and soul-easing climate of the "Sunny South."

Again, we have to consider the effects of sea air and mountain air upon mental invalids. As nearly as can be discovered, we find that the sea air, with its increasing percentage of ozone and

chloride of sodium, has a soothing, quieting, consoling effect upon the victims of maniacal excitement.

Again, in the mountains, during the summer season, we notice that the victims of blackeyed melancholy and grim despair receive new inspirations, and new hopes, and new happiness while dwelling amid the majestic heights of nature. Here the air is lighter, and hence it is more readily consumed by the industrious health seeker who breathes properly and abundantly. Here, too, the inspiring grandeur of nature is disclosed, and the heart is bouyed up by considering the wonderful and mighty works of the great Creator.

Now the object of this consideration of climate, and its effects upon the insane, is to see if some means may not be devised for placing each individual case of insanity in such a climate as shall most readily and certainly dispel disease, or at least remove the subtle causes which impel it; and in that way permit the patient to travel of his own volition over the road to health.

The victims of mania, and the victims of general paresis, and the victims of all forms and shades of insanity which have been caused, more or less, by the unbridled exercise of the ambition, and the unwise and unhealthy greed for gain, should be encouraged to live in a climate like that of Florida. While these patients may not all recover, yet we believe that the lives of even paretics may be prolonged and made more comfortable by transportation to a soft and enervating climate.

In addition to the climate of Florida, we might suggest the yet more attractive and certain climate of Southern California. Here the sick could be transported every fall to escape the rigors and tortures of a northwesterly winter, and mental rest could thus be most surely attained.

The victims of mania should be, at least during the moderate seasons of the year, furnished with homes upon the shores of the ever-resounding ocean; while cases of melancholy may be encouraged to climb the mountain peaks, and in that way get into the presence of Him who cheers and stirs and encourages the heart of man.

A few years ago we spoke of having branch hospitals for the insane connected with each institution, so that the patients might

be transferred from one to another during different seasons, and thus afforded the benefit of treatment as far as is possible within the borders of this commonwealth. Now that Kings county has become a part of the State care system, and the Long Island State hospital at King's Park is established, would it not be feasible and advisable to transfer some patients now located in the uplands to the hospital near the seashore, while some who have long been there might be sent up among the hills? Would it not also be a good plan to establish a State hospital for the insane among the highest peaks of the Catskills, or upon the loftiest lands of the Adirondacks? These matters may justly be considered by our Commissioners in Lunacy, our boards of trustees, and by the thoughtful and benevolent gentlemen of which the coming legislature is presumably composed.

The Blood of the Insane.

Insanity is a blood disease — that is, in every case of insanity we believe that there exists a condition of impoverished or degenerated blood. Also, we may state that the currents and impulses of the vital fluid are perverted or changed in every case of mental disorder. There is either an accelerated impulsion, as in cases of mania; or there is a sluggish circulation, as in cases of abject dementia, or stagnant melancholia. But the leading feature in all cases is an impairment of the quality and tone and purity of the blood itself.

Let us see what these blood changes are as far as they are observable by scientific effort.

The relation of the state of the blood and insanity varies greatly according as we view that fluid anatomically or physiologically; and again, if we direct our attention but to itself, or, too, to its distribution; the physiology of blood involves general nutrition, its distribution the circulation.

Theoretically, separation of the above conceptions is precise, but practically impossible. Their boundaries merge everywhere into each other, and any elaborate consideration would have to treat with all; as such, however, can not be the domain of this paper, an effort will be made to keep but to the blood proper, even though the completeness suffers.

The relations of blood with insanity appear both causative and resultive, though precise facts over both these propositions, but especially over the former, are very meagre. From what is known, it may be established with fair certainty that the main changes concerned are those of its chemical composition, then its histology, and finally its quantity; whichever of these changes occurs, hemogenic disturbances of circulation attend and accentuate it. These changes are found both prior and during alienation. Before, they assist, sustain other causes, and may even indirectly determine mental diseases; during this, they sustain whatever pathological process may go on; they disorganize the secretions, produce unhealthy changes in the skin and bones (dryness, pigmentation, eruption, retrograde changes, in first, augmented fragility in second); modify the excretions (principally the urine); and, in certain proportion of cases bring forth the fatal termination.

The perceivable pathological changes in blood before and in insanity are almost entirely histological, the chemical alterations being too subtile for demonstration, and even for detection. Those changes consist in diminution of red or increase of white blood corpuscles, they are of anaemic or leukaemic nature, in other words; they are exceptionally extreme, but often chronic. The only ascertained chemical change consists in varying diminution of the hemoglobin. They almost all preponderate in the female.

So much for general about this subject, and we will take up the special insanities; before this is done, however, a little reflection seems necessary.

The causative influence of unhealthy blood in mental disorders is certain (Krafft-Ebbing, MacPhail, Griesinger, etc.), but how comes the blood deteriorated? Blood is absolutely passive, and all its changes are under nervous control. Everything normal, blood will always stay normal. Three classes of pathological effects can affect it, aside from its direct loss:

- (a) Disturbance of its nervous control;
- (b) Disease of organs on which it depends; and
- (c) Contamination.

Such being the circumstances, we are not authorized to stop at abnormal blood in a search for a pathogenic cause of any dis-

order. We have to search for the primitive cause, or we should be liable to commit the same oversight as in attributing malaria or typhus simply to poisoned air or water.

As to blood changes in special forms of insanity, the following is established:

Mania.

Predisposing.—Anaemia, simple; ischaemia, as after large losses of blood; prolonged weakening of blood, as in lactation; weakening associated with deterioration, as after infectious disease. Accompanying, resultive (?).

Melancholia.

Predisposing.—Anaemia, general malnutrition, protracted blood affecting conditions.

Resultive.—Profound and pernicious anaemias; oxydation diminished; toxicity of both blood and urine augmented; occasionally petechiae hematomes. "In forty-two cases (sixteen male, twenty-six female) deficiency in the red blood corpuscles was observed in fifty per cent.; the richness in hemoglobin was found reduced even in higher proportion." (MacPhail, Tuke's Dict., p. 134.)

Paranoia.

Anaemia and ischaemia states frequently causative. Developed disease rarely accompanied by blood disorders.

Epileptic Insanity.

"Defective nutrition of the body, including anaemia, has long been recognized as a predisposing cause of epilepsy.

"Of 100 cases, on admission, thirty-seven recorded a lower percentage of red corpuscles, forty a higher than normal." (MacPhail.)

Dementia.

Percentage of red blood corpuscles often below normal, and then progresses with the age of the individual. Percentage of hemoglobin also often diminished. Tendency to obesity. Changes in blood most frequent in senile dementia, and in those following or accompanied by masturbation.

General Paresis.

Slight anaemia often preceding. First stages: "Leucocythemic condition in twenty-five per cent. of the examined, more marked in males than females. A lower percentage of red blood corpuscles in thirty-three per cent., more in women." (Seppilli.)

Late stages: "Increase of white and diminution of red corpuscles, worse in males; absence of hematoblasts; tendency to form rouleaux last." (Sutherland, MacPhail.)

"Confusional, phthisical, rheumatic and syphilitic insanities are generally both preceded and accompanied by various stages of anaemia."

Degeneration and Regeneration.

Nowhere in the world are the victims of degeneration — physical, mental and spiritual — more in evidence than within the wards of a hospital for the insane. Here we find a congregation of helpless and deplorable degenerates. To relieve these sick ones of their actual degeneracy, and still further of their hereditary or acquired tendencies, is, or should be, the persistent aim of the philosophic physician.

Much has been written and said about degeneration. This subject has been explored and dissected with all the vigor, skill and persistence of the pathologist, who searches out the conditions of the cadaver, or the bacteriologist, who seeks, with microscope, or by chemical reaction, to discover the haunts and the habits of that germ life which is so inimical to human life.

It is right and proper that scientific researches should be made within all the realms of degeneration. We should seek constantly to understand and know about those strange, curious and mysterious influences which drive, with swirling impulses, the barks of humanity across the vast and varying ocean of existence.

The condition of the boat itself, the nature of its occupant, the skill of its manager and propellor, the devious courses of the tides, and the subtle and swaying influences of every breeze or wind must be considered and weighed when we would determine the probable termination of the voyage.

Having studied the conditions of degeneration, we should not then rest from our labors, for that would be the ending of an

incipient and unsatisfactory task. The highest aim of the philosopher should be to not only discover what has been, but to find out and formulate methods which shall lead human beings to outgrow their former diseases, and to upbuild in their stead, within the temple of life, the genius and the glory of full and complete health.

Regeneration means the overcoming of all evil and the substitution in its stead of every good and noble virtue. Goodness can not be established successfully in a diseased body or a bad heart except through the process of an ample, and a toning and a rebuilding regeneration.

It is the province of the State to disclose to her citizens the disastrous conditions which may exist under certain forms of indulgence and custom; and likewise the State should unfold to the minds of every thoughtful man and woman the means and measures by which disastrous tendencies in the past, or disabling circumstances in the present, may be met and overcome, and superseded by those things which make for the growth and improvement and perpetuation of the human race under favoring states of health and happiness.

The degeneration of the human race commenced with the primal pair, and was a result of physical, mental, moral and spiritual indigestion. This complex and compound dyspepsia was caused by an overgreedy inception of forbidden fruit.

From the days of our first parents down to the present time, there have been developed in all races and nations of men every conceivable form and grade of mental, physical and spiritual degeneration.

Among the physical types of pathological retrogression within the human temple we note, especially, cretinism, rachitis, epilepsy, consumption, cancer, syphilis, and something else which has been styled "scrofula."

Among the types of mental degeneration we note idiocy and imbecility, and the various dementias which follow in the wake of acute insanities, or which result from the various forms of human excess, such as gluttony, salacity and alcoholism.

In physical degeneration we note the poisonous effects of

hereditary taint; and likewise conditions in which the children of fate drift by tendency, by impulse, and by adverse and unconquerable force toward those passional and emotional obliquities which result in disintegration or death.

Physical degeneration is a result of imperfect nutrition, of mal-assimilation, and of hypertrophic or atrophic metamorphoses. These always occur when the functions of the *corpus humana* are performed in a fashion that is inharmonious with the requirements of physiological perfection.

Mental degeneration depends largely upon physical degeneration. Diseases of the body which produce a lowering of its natural forces, or a divergence from its normal functions, tend to disturbed, distorted and diseased states of the mind.

The conditions of the body which increase the activities of the blood currents, quite naturally stir and stimulate to extra action the working powers of the mind.

Every thoughtful observer must, therefore, conclude that "*mens sana in corpore sano*" is not only an ancient, but an oft verified axiom in human experience. This sound condition is best attained by obeying the ancient injunction to avoid all undue excesses and continue constantly "*in medias res*."

But how shall this sound body be acquired and preserved, in order that the sound mind may be its normal and constant life companion?

As we glance over the history of our unfortunate yet progressive race, we find that sin and sickness, and riotous physical and mental diseases are the positive and inevitable heritage of those who sprang from a pair created without sin; a pair that was surrounded with every possible comfort and blessing for the growth and perpetuation of physical and mental health. And yet, these "only originals," through their stubborn perversity, not only brought down curses upon their own heads, but they fermented and distributed the yeast of sin among their own immediate descendants, and likewise throughout all succeeding generations.

Max Nordau has recently presented to the world an interesting and novel work entitled "Degeneration." It is a work consisting

of five books. One book he heads, "*Fin de Siecle*;" another, "Mysticism;" another, "Egomania;" another, "Realism;" another, "The Twentieth Century."

In these books he pictures the lives and experiences of those who are excessive in their views, and their imaginations. He describes the meteors, the comets, and the falling stars that scoot through the firmament of a degenerate humanity in erratic and eccentric courses.

We recognize in his work the imbecile dude of the "Cholly" order; the aesthetic dreamer and the vile liver of the Oscar Wilde school; the vague and yearning novel reader who worships at the shrine of Ibsen, or Tolstoi, or Zola; the platonic and sighing musician of the Richard Wagner cult; and the maniac of the egotistic variety who sees the whole world when he looks into the shallow pool of his own existence, and who never tries to look out and see something beyond his own marvelously inimitable self.

Attenuated longings of the soul for the impossible or the unattainable, lead to the neglect of correct physical culture, and the abandonment of lofty and ennobling physical development.

Nowhere is human degeneration more apparent than among the drivelling day-dreamers of life, and the willowy panderers of aesthetic novelties, or the namby-pamby fools who have been allowed their own way in compliance with a sentiment which leads to unwise laxity of discipline.

Parents should be kind and gentle and generous, yet just and strict with their offspring. To allow an untrained child to have his own way is to foster degeneration by allowing willful perversity and ignorance to rule the scions of coming citizenship.

If parents feel that they do not know enough to govern their children, but that they should allow each child to govern himself, then they should refrain from the sacred responsibilities of parentage. Those who assume these responsibilities should rely upon the ancient and famous, long-tried and successful discipline of Solomon. It has been truly said that if you "spare the rod, you spoil the child," and certainly the rod should be used whenever it is necessary; but it should always be held by the hand of prudence, and directed by the brain of wisdom.

By the proper use of the rod, the subcutaneous capillary circulation is vastly improved, and the mind of the dreamer is diverted from things in the clouds to things which are "of the earth, earthy."

Practical common-sense may thus be injected into the system of the aesthetic imbecile, and thus the progress of degeneration may be checked, or its effects antidoted.

In helping the race across the chasm which lies between degeneration and regeneration, we must build a cantilever bridge of purpose, and impulse, and struggle, and recognition of the laws which govern and control human progress in every avenue of life.

Over this bridge must be marched the stalwart forces of regeneration — forces from which the victims of degeneration have been weeded out, even as the forces of the Israelites were relieved of grumblers and complainers and skeptics by a forty-years' march through the wilderness.

Only those who are filled with new blood, and inspired by new faith, new hope, new courage and new enthusiasm which impels them to attain the highest possible acme of existence, should be permitted to enter the new paradise of the new regeneration.

The teachings which will eventually lead to a regeneration of the race are embodied in the old Ten Commandments (which must be correctly interpreted by the latest light in science), and the old, old story of the Golden Rule.

Diversions from these tenets, or misrepresentations of the same, or over-use or undue repression of the powers of men, or unwise violation of the commands of a just Jehovah, are the exciting causes of degeneration. Hence, to work the miracle of regeneration there must be a new interpretation of the old laws, and a new application of the forces and philosophies which govern, control and compel symmetrical development of the loftiest powers.

The interpretations of the past have often been imperfect and unproductive of good. Therefore, broader and yet more discriminating interpretations of the will and the purpose of the Almighty must be disclosed and utilized.

In the past, and even in the present, men have talked bravely

about avoiding a violation of some of the commandments, while they have ruthlessly and recklessly violated others without the restraint of even a temporary compunction of conscience.

"Thou shalt not bear false witness against thy neighbor," is a commandment that is almost universally violated. Its violation is excused under the plea of warrantable criticism of another's acts.

It is probable that the violation of the ninth commandment is the cause of more bickerings and quarrelings, and heart-burnings, and sorrows, and chilling shocks upon the heart, and general damage that leads to degeneration in many ways, than a violation of all the rest of the decalogue combined.

In fact, when the ninth commandment is violated there is embodied in that act a violation of other commandments; for in violating the ninth there is developed that form of passion which is a dishonor to the name and purposes of Jehovah, and a dishonor to one's parents. Whoever violates the ninth commandment seeks to rob his neighbor of his most precious rights, and likewise he seeks to kill his neighbor's reputation, or he burglarizes his neighbor's character; and these are acts as offensive in the sight of God as is the act of murder itself. These, too, are acts which constitute the most flagrant of criminal libels.

The ninth commandment violator is generally the most debased, debauched and degenerate of human beings. The first effort of regeneration will be in the matter of avoiding the injury of others. This is a duty as imperative and important as the act of self-preservation, which has been styled "the first law of Nature." Whoever seeks to avoid the injury of others, by word or deed, drifts naturally into a benevolent and philanthropic spirit, and seeks in a short time, by natural impulse, to help those around him.

It is unnatural to remain impassive under any circumstances for any great length of time. One is either climbing the hill of progress, or sliding down into the slough of sin. One is either injuring his fellow-men, or he is accomplishing good work in behalf of his neighbors. Even a chip in an eddy, while it makes but little progress in the stream, is constantly moving around in a circle of untiring activity; and so "a conservative" may think

that he is standing steadfast upon the platform of a given principle, while in fact he is constantly whirling amid the impulses of his maelstrom surroundings. People will either become more and more degenerate and fall into bad ways, which lead to destruction, like those who lived in Sodom and Gomorrah and Babylon and Carthage; or they will seek to improve and grow better until at last, as in the imperial city of the world, they obey the laws on the Sabbath day, and refrain from unwise and reckless intoxication.

To accomplish the purpose of the foregoing lines upon regeneration, we must begin by selecting, as far as possible, strong, healthy persons, and these should be united in such a way as to accomplish a happy blending of temperaments and powers, so that healthy children may be the result of each union. This task should be conducted upon a sensible basis. The young should be taught to seek only such associations as will tend most certainly to develop and maintain their best and noblest powers of body, mind and soul. This method of prospective union should be taught in all our schools as a part of the philosophy of education.

Physical regeneration must be accomplished by the use of appropriate food, and by suitable exercise, and by correct breathing. In other words, the people should monopolize all the health-giving properties of sunlight and fresh air, and the normal use of every physiological function of the body, together with such nourishment as shall most certainly repair wastes, promote growth and avoid decay.

Each human being should accept the fruits of the earth, and the grains and vegetables of the fields in carefully selected and scientifically attained proportions. The use of meats should be restricted to those who are much in the open air, and who are toiling heavily, and thus eliminating the evil effects of the gluttonous use of animal food.

Correct methods of selecting and cooking foods are being studied now with profound and zealous interests, and the interests of the world are being rapidly conserved by the investigations and researches of those who belong to the Ralstonian school.

While the food question is one of great importance, and can never be overlooked or neglected by those who are seeking to become regenerate, there is another active duty in behalf of the physical temple, and its mental and physical occupant, and that is the proper inception of pure air. There is nothing in the world which more absolutely stimulates and purifies the blood in its courses than pure air; and there is nothing which so stirs the mind to exalted action, or inspires the soul to most ecstatic flights of hope and happiness, than the act of inhaling sufficient quantities of God-giving air.

Regenerates must not only eat and sleep, but they must breathe, and they must breathe accurately, fully, scientifically, and understandingly, or they will be unable to attain the fullest possibilities of life. Many a fair, frail young person has died because she would not undertake or continue the task of proper breathing. Many a person has become insane because he or she would not breathe properly. And there are many instances upon our wards at the present time of persons who are sitting down in the darkness of melancholia, or drifting with the tides into the trackless ocean of dementia, because they will not breathe as they should. Shallow breathing is the arch enemy of our race, as demonstrated by observing cases of insanity and consumption everywhere. When we learn to eat, and breathe, and sleep, and work, and think correctly, and in accordance with our loftiest possibilities, then we may become regenerate.

From a physical standpoint my interne has formulated, under my direction, in brief, the philosophy of regeneration, which I herewith present:

Regeneration is an organic restitution.

An organism is a reactive molecular aggregation kept in existence or alive by the resultant of all the forces of the molecules involved.

The exact mass of molecules necessary to a perfect existence or life of a given individual at a given instant, is its organic entity.

Every organism is reactive; it occupies a certain part of the universe, which is a field of influence, and consequently every organism is active. Activity is a transchange of force; hence,

an organism, to be active, must have a supply of energy. Organism is not qualified to use free energy; the only power it can utilize for its activity is the stored-up or potential power latent in highly complex, easily decomposable molecules; such molecules have to be stored-up, in most accessible places, in the organism, and they form a supplement of its entity. Both together, the organic entity and the stored molecules of energy constitute the body of the individual.

The molecular stores of an organism are being continually used up; that the organism may continue capable of reaction required, there must be a more or less continuous restoration of the supplies. Regeneration conditions a loss of some portion of the entity of an organism.

All loss in an impressible body, like organism, is a form of stimulation, and its point becomes a point to which energies of equilibrium of the organism are directed.

An organism is a passive result of conditions; that is, one of the effects of the reactions of universal law, power and matter. One of its fundamental qualities is growth of its entity. Growth is continuous and general; never is there any part of organism that would not grow (even during a decline there is a growth, only overwhelmed by the disintegration). Growth consists of two main processes: The supply of necessary constituents or molecules, and their organization. Both these go in each organism with regularity, and with an extent proportionate to the use, and constitute progressive equilibrium. Their interruption in any smaller part of the organism is followed, as stated, by stimulation, which produces direction of energies toward the part effected, and consequent greater supply of molecules and increase of organizing propensity, which both are, to certain extent, in proportion to the stimulation.

The act of regeneration itself is nothing but a phase of normal cellular action, proportionate to the impulse.

Deductions.

Restitution of organic substance is conditioned by the following:

1. The quality of stimulus.
2. The facility of its transmission.
3. The supply of needed molecules.
4. Powers of organization.
5. Freedom of processes.

Particularized somewhat more and applied to man, these deductions will read, as follows:

Regeneration of human structure is proportionate to the following:

1. The quality of the wound or loss; the tissues affected; overstimulation (shock), as long as its effects persist, is opposed to regeneration.
2. The perfection of innervation.
3. The supply of food; the states of the processes of assimilation and elimination.
4. To simplicity of tissues; their youth; the reconvertibility into formative (primitive) tissues; their general health and vigor.
5. Absence of hindering conditions, internal and external.

Very much has been written and said about the degeneration of man. Comparatively little has been formulated and presented upon the topic of regeneration outside of the pulpit. The teachings of the ministry, so far as they inculcate moral truths in the minds of the young, are beneficial; but, in order to produce a satisfactory and successful regeneration of the race of man, we must have:

1. Proper and thorough development of the physical forces.
2. A full and complete growth of the moral forces in the garden of the heart.
3. A recognition of the value of religious forces that shall bind back and hold in check all undue exuberance of the emotions, and passions, and lusts of the flesh.

And just here we may consider the balancing of those subtle forces of passion and impulse in such a way that there shall be no undue waste of acquired strength, nor undue repression of those God-given powers which are made to be used in the courses and developments of nature. Use, without abuse, of all the good things of life, is to be the watchword and the slogan of the coming man and the coming woman. They shall indeed be gifted with a cognizance of the functions and duties of life according to the highest and best development.

Regeneration will come only through the combined efforts of religion and science. Science is knowing the truth about religion as well as about material facts. Imperfect science cannot honestly decry religion simply because it does not understand it. Some people think science refers only to that which can be felt, seen or measured. That reduces science to a very small part of the universe, and destroys the logic of sequence. Such a view of science shuts off from man the other side of every star.

The play of spiritual light upon the powers of man will be more luminous and more pervasive in the future than in the past. Physical development alone, simply makes a splendid animal of man. It is only by illuminating the human being with spiritual light that we shall have helpful moral growth, inspired activity of purpose, and steadfast security in the plans and purposes of the author of the everlasting principles of right.

Regeneration must be, we believe, of a lofty and spiritual nature; not according to any arbitrary creed, but in compliance with that breadth of culture, and that freedom from religious cant which are to become inherent parts of the inevitable logic and philosophy of life.

Maudsley says: "To have a well-built and stable mental organization attests the virtues of forefathers who built wisely in well-doing of thought, feeling and conduct. If a bad passion or vicious impulse or false thought or evil desire invades a mind of that sound composition, it is an invader in a hostile territory, meets with no sympathetic welcome, encounters instead a silent strength of resistance which, being infixed in structure, is molecular, and for the most part unconscious. There is no need

to raise a signal of alarm and busily to muster the forces necessary to combat it, for the silent repugnance of a good nature is enough. Whosoever must go about to summon consciously the forces of virtue in order to think wisely, feel rightly and do well on the occasion of a temptation to do wrong, has not a mind thoroughly well-fashioned, stable and sound, but at best a moral character which is in process of formation, forming not formed, and therefore not whole and thoroughly stable."

In conclusion, let me state that in order to succeed beyond the peradventure of a doubt, in the training of a race of sound, sensible and symmetrical regenerates, we should commence the work of purification and growth in the great grandfather of the child. It will take at least 100 years to accomplish the purpose suggested in this connection. The work invites the attention of every thoughtful man, whether he is cursed with the hypertrophied seeds of degeneracy or whether he is favored with long and continued courses of pure and healthful blood. The conflict of the coming age will be a conflict between the forces of reckless degeneration on the one hand and the marshalled hosts of a new and regenerate life on the other. To every philosopher and worker in the cause of a higher humanity, we may say: "Come out from among them and be yet separate."

We write these things because we wish to reduce the number of degenerates within our State hospital wards, and this can only be accomplished by increasing the crop of regenerates in the rising generation.

This portion of our report is a public, and we believe a timely warning, to both parents and their offspring.

Educational Facilities.

Training school for nurses.— We still continue to afford such educational facilities to our attendants and workers on the wards as shall eventually fit them in the best possible manner for the grave and responsible duties which pertain to the office of the trained nurse.

The task of educating the young for solemn yet glorious duties is a beneficent and far-reaching one. The object of education at the outset is to furnish each student with a series of general yet

important facts. When a general knowledge of primal principles has been acquired, then the energies of each individual mind should be directed toward the accomplishment of that which is easiest and most natural to that mind.

Every human being should be permitted and encouraged to develop his strongest traits of character, if those traits lead to the undertaking and achievement of good work in behalf of humanity and truth.

A training school for nurses ranks higher than the common school, or even the academy; because it seeks to fit for a peculiar and trying work those who are after careful experimentation found to be adapted to the care of the sick.

During the past seven years the training school at this hospital has graduated fifty-seven nurses. During that time, four hundred and twenty-nine nurses have been employed on the wards. Some of these remain in the employ of the hospital; others have left, or been discharged. All who have been employed were prospective candidates for graduation; but in this, as in some other things of life, we may apply the ancient assertion that "Many are called, but few are chosen." Still, about twenty-five per cent. of all the attendants employed, during the period aforementioned, have graduated as trained nurses. This is a good proportion, when we consider the fact that small wages do not induce the best persons in the community to apply for positions in the State hospital service.

In training our nurses for their life work, we seek to impress upon them the fact that no great achievement can ever be wrought without the practice of industry. A discontinuance of activity soon begets a disinclination to the making of effort, while the continuance of methodical labor brings not only the truest happiness, but constantly increasing power for work.

In the training of nurses for the care of mental invalids, we endeavor not only to develop the body, and cultivate the hands and the brain, but also we seek to instill within the mind the forces of moral conviction. Whether convictions are sound or erroneous makes a vast difference in the struggle for progress which is always going on. It is of the most vital consequence, it seems to

me, that at the beginning of all educational work, and particularly a work that fits a human being for a specialty, there should be right ideas and conscientious convictions of justice and truth.

Trained nurses will be sympathetic, and kind, and attentive, and devoted to the best interests of their patients only when they are under the influence of honest beliefs as to the right and proper performance of the most solemn of duties. Trained nurses cannot always be watched, but they may be taught to watch themselves, and to live constantly in the presence and under the direction of the All-seeing Eye and the Guiding Hand.

If we would be potent in the realms of philanthropy, we must be so not only by physical and mental culture, but likewise by the development of good moral impulses. Hence, our teachings should relate to the latter as well as the former.

It is something we should not forget, nor ever be unconscious of, that when we are in daily contact with those whose lives we are endeavoring to develop or direct, our example is never lost; our teachings are not idle; and they do not die upon the desert air. Whenever, by any means, we give a direction of aim and impetus of activity to a human mind, we reach far off times and unknown interests. Let these facts have their due impression, and a new and infinite significance will be attached to our relations to men, to our opinions and utterances. And if anything can lift us to a just appreciation of the grand mission of life, can make us scrutinize our convictions and measure our words, it will be a due reflection upon the fact that we are all teachers, and that what we say and do will sweep so far.

Lectures to Nurses.— During the past year the following list of lectures were delivered to the nurses in the training school:

Dr. Talcott:

- (1) Cleanliness in the sick room.
- (2) Air, light, water and noise in the sick room.

Dr. Allen:

- (1) Insanity; its history, definitions and varieties.
- (2) Qualifications of a good nurse and her various duties.
- (3) Emergencies and their treatment; hemorrhages, bruises, wounds, and foreign objects in cavities of the body.

(4) Emergencies and their treatment; burns, scalds and frost bites, the conditions of unconsciousness, and poisons and their antidotes.

Dr. Kinney:

- (1) Bathing and artificial feeding.
- (2) Massage, with practical illustrations.
- (3) Familiar facts for nurses.
- (4) Duties of the nurse to the physician.

Dr. Arthur:

- (1) Physiology of digestion.
- (2) Physiology of assimilation and nutrition.
- (3) Surgical dressings and their applications.
- (4) Bandaging.

Dr. Ashley:

- (1) Anatomy.
- (2) Anatomy.
- (3) Disinfectants and disinfection.
- (4) Anesthetics and antiseptics.

Dr. Barrus:

- (1) Gynaecology.
- (2) Obstetrics.
- (3) Obstetrics, continued.
- (4) Obstetrics, continued.

Dr. Hrdlicka:

- (1) Anatomy.
- (2) Physiology of the nervous system.

Graduates of training school.— July 23, 1895, another class was graduated, and the following is a list of the graduates:

Augusta Allison, Anna Allison, Ella McNamee, Rose Etta Foster, Mary B. Williams, Daniel Martin Lahey, George H. Swartwout.

Graduating exercises.— The graduating exercises were held in the Library Building, and consisted of addresses by Rev. Henry Loomis, and the Medical Superintendent; and presentation of diplomas by Dr. Kinney.

In the evening, a banquet was given to the graduates, and a few invited guests, in Pierson Cottage; and ample justice was done to it. Dancing and games followed the repast, and at a seasonable hour the guests and nurses separated with the pleasing consciousness of having spent one of the pleasantest evenings of their lives.

Improved educational methods.— During the coming year the methods of education will be somewhat changed, and there will be more teaching, and perhaps less lecturing. The class will be regularly taught and quizzed by the younger members of the medical staff. The attendants will be instructed not only in the duties of nursing the insane, but likewise they will be trained in the work of general nursing of the sick, and also in the care of sick children. In fact, we shall seek to give the nurses here as complete an education as we can possibly afford under the circumstances.

School for patients.— A few years ago we established a school for the young insane. A large school room was provided with suitable desk forms and other necessary school appliances. A teacher was employed who devoted her entire time to the work of instruction, not only during school hours, but at other times in the various parlors and halls of the hospital.

The school was opened for one hour per day for women patients, and one hour per day for men patients. A great deal of interest was manifested by those who attended the school. Sometimes those who had passed the meridian of life would take up the studies of youth with renewed relish and zeal. Sometimes the young who had been dull, apathetic, and hopeless would become bright and interested in their work, and happy in the performance of their daily school tasks. I think we may attribute, in several instances, a start toward recovery through the benign influence of the hospital school for patients.

We are obliged, however, to state that the time came when the school-room had to be cleared of its appliances, and we were forced to put beds in the place of desks, on account of the overcrowded condition of the institution. The services of the school-teacher were also dispensed with for economic reasons.

We hope that the time may come when, by the erection of new

and commodious buildings, we shall be able to have another school-room; and we also hope that our legislators may become so enlightened upon this subject that they will recognize the need, and order the furnishing of a suitable school-teacher for the young insane in every hospital in the state.

While we have no teacher devoting her time wholly to educational matters in this institution, we may state that, after all, each medical officer, and each trained nurse is, as far as practicable, a teacher of the insane; and each in his or her sphere give daily lessons to mental invalids in the higher branches of those philosophies and metaphysics of life which lead our pupils to bear patiently the evils of misfortune and disease, and to look away from present sorrow, and toward the joyous possibilities of a happy future—a future that shall be crowned with renewed health, and renewed hope, and renewed trust in the final triumph of all things which are good and true.

Amusements.

In-door amusements.—The weekly dances have continued throughout the year, and have brought their usual relief from the monotonous conditions of the wards. Games of all kinds, such as cards, checkers, dominoes, halma, billiards, pool, etc., have been freely permitted throughout the institution. These games add greatly to the social life of the patients, and they serve to stimulate the mind pleasantly, and give at least temporary relief from thoughts of care and brooding sorrow.

Entertainments.—The following is a list of entertainments which have been furnished from time to time for the happiness of the patients:

Literary and musical entertainment, Middletown State Homeopathic Vaudeville Co.

Musical and reading, Misses Gumaer and Miss Biggart.

Thanksgiving reception.

Schubert club musical.

Christmas reception.

New Year's dance and reception.

Reading and musical, Adele Weber and Mrs. W. C. Tower.

Variety entertainment, Ellinwood players, Vaudeville Co.

Band concert, 24th Separate Company Band.

Reading, W. H. McCollin.

"The Opera Singer" (comedy), Ellinwood Vaudeville Co.

Variety show cake walk, Prof. Henderson's Variety Co.

Entertainment by Society Club.

Minstrels, Ontario Hose Co.

Reading, Chas. F. Underhill.

Washington's birthday entertainment.

"Georgia Wonder."

Magic, Prof. Plate.

Manual of arms drill, 24th Separate Co.

Annual "May Dance."

Acrobatic entertainment, Prof. Barnard.

Will R. Nolton's Absurdity, "Telephone Register."

Musical, Congregational church choir.

Variety entertainment, Midway Park Vaudeville Co.

Vaudeville, Harry Graves' Co.

Concert, Pioneer Band.

Band concert, "Cyclone" Band.

Military evolution on the lawn, and an elaborate dress parade, which was participated in by the 5th Separate Company, of Newburgh, and the 24th Separate Company, of Middletown.

During the pleasant weather season our patients were afforded the pleasure of witnessing a series of military evolutions.

Entertainment, Miss Sturgeon (armless wonder).

Entertainment, Juvenile Amateur Co.

Out-door amusements.— Out of doors we have had a few games of base ball, but not as many as in the season of 1894, because our aggregation became so famous that most of the Asylum Nine went upon State League nines last spring. However, with the "fragments" which were left we made up a nine which succeeded in winning the championship of Orange county; and if the new nine continues to improve as it did during the month of September this year, we will probably win the championship of the State next year.

In addition to base ball, the patients have been afforded oppor-

tunities for playing croquet and lawn tennis. Many of the feeble and infirm have enjoyed walking through the park where it is well shaded, or sitting upon benches under the trees. Pastoral peacefulness is fully exemplified when you see hundreds of mental invalids in restful repose under the shade of protecting trees, and fanned by the breath of gentle breezes in the midst of a summer's day.

Requirements.

More hospital room.—This institution needs more room for patients. A building should be erected for men on the south side of pavilion No. 2, and to correspond with Talcott Hall, north of pavilion No. 1, which is now occupied by women. A new hospital dormitory should be erected for women, where the recent insane could be placed, and cared for, and treated, for the special purpose of effecting early and permanent recoveries.

Pathological laboratory.—A pathological laboratory should be fitted with needful appliances. The present morgue, if properly renovated and heated and lighted, and supplied with needful tables and instruments, might answer the purpose.

More employes.—A somewhat larger force of employes would render the work of caring for the insane easier and more satisfactory. With a force made as small as possible for economic reasons, there is always more or less strain, and friction, and over-wear; and the condition is not favorable for the accomplishment of the highest and best curative results.

Firemen.—There should be three sets of firemen, instead of two, in order that the work in the boiler-house may be easily performed without danger of over-fatigue, and consequent neglect of duty.

Prizes to attendants.—The system of giving prizes or rewards for long-continued and especially faithful and intelligent services should be established. Prizes are given in school; rewards are given to brave firemen for the saving of life; trophies and medals are bestowed upon successful and valiant soldiers. Here are general precedents for prize giving, and that, too, under the auspices of public authority.

Again, rewards are given at Gheel, Belgium (the oldest asylum

in the world) in the form of diplomas to those who nurse the insane, and who have given satisfactory care of a given patient for a term of five years. The evidence of the government's appreciation of that work is hung upon the walls of the cottage of the Gheel peasant, and is pointed at with pride and gratitude. In view of these facts, why should not the State offer prizes to those who engage in the extra hazardous task of taking care of the insane, in order to stimulate the accomplishment of the noblest work under the most strenuous circumstances? Why should not the State give a prize to the most accomplished nurse in each graduating class? Why should not the State grant the privilege of retirement on half pay after a service of fifteen or twenty years? Very few men or women after caring for the insane for fifteen years can successfully enter upon any other duty, or gain a foothold in any other field of enterprise. They have given the best portion of their lives to the service of the State, and to the cause of suffering humanity. They have exposed themselves to the dangers of injury which may be inflicted upon them at any time by the most reckless and desperate members in the community—namely, the irresponsible and superlatively strong maniacs. This matter should have a fair and just consideration by the legislators.

Better wages.—During the past three or four years there has been a tendency to depression of wages everywhere on account of hard times. Now that good times are apparently looming up in the near future, we would respectfully plead for an increase of wages for all the satisfactory workers in our State hospitals. Even a moderate percentage of increase would give new courage and new stimulus to the energies of those who are still faithful to their trusts.

Voluntary patients.—A most important matter in this State should be a provision, by law, for the admission and care of voluntary patients. A law for this purpose has been devised in the State of Massachusetts, and is as follows:

Massachusetts Law.—“The superintendent of any insane hospital, private or public, may receive and detain therein, as a boarder and patient, any person who is desirous of submitting

himself to treatment, and makes written application therefor, but who is not so insane as to make it proper to grant a certificate of insanity. Such patient shall not be detained longer than three days after having given notice, in writing, of his desire to leave. When such patient is admitted, notice shall at once be given to the State Board of Health, Lunacy or Charity, who shall cause the case to be investigated.”*

The foregoing law has worked successful and satisfactory results in the old Bay State, and we have no doubt that it would afford great relief to many voluntary seekers after treatment and cure in the Empire State.

The Protection Sheet.

When we entered this institution, nearly nineteen years ago, we found iron, wood, leather and cloth used as means for restraint. We have dispensed with the use of everything but cloth, and we use that in the form of a “Protection sheet.” Some have thought that this protection sheet is harsh, and that trained nurses should take care of the patients without the aid of this dumb, but helpful aid, which, it seems to us, is mild and beneficent.

The protection sheet is not used as a substitute for a trained nurse at this institution, nor should it ever be prostituted to so low a purpose. When properly, judiciously and skillfully applied it becomes simply an aid to the trained nurse; and there are times when trained nurses need assistance in the performance of their duties, provided that assistance can be properly selected, and a salutary use made of the selection.

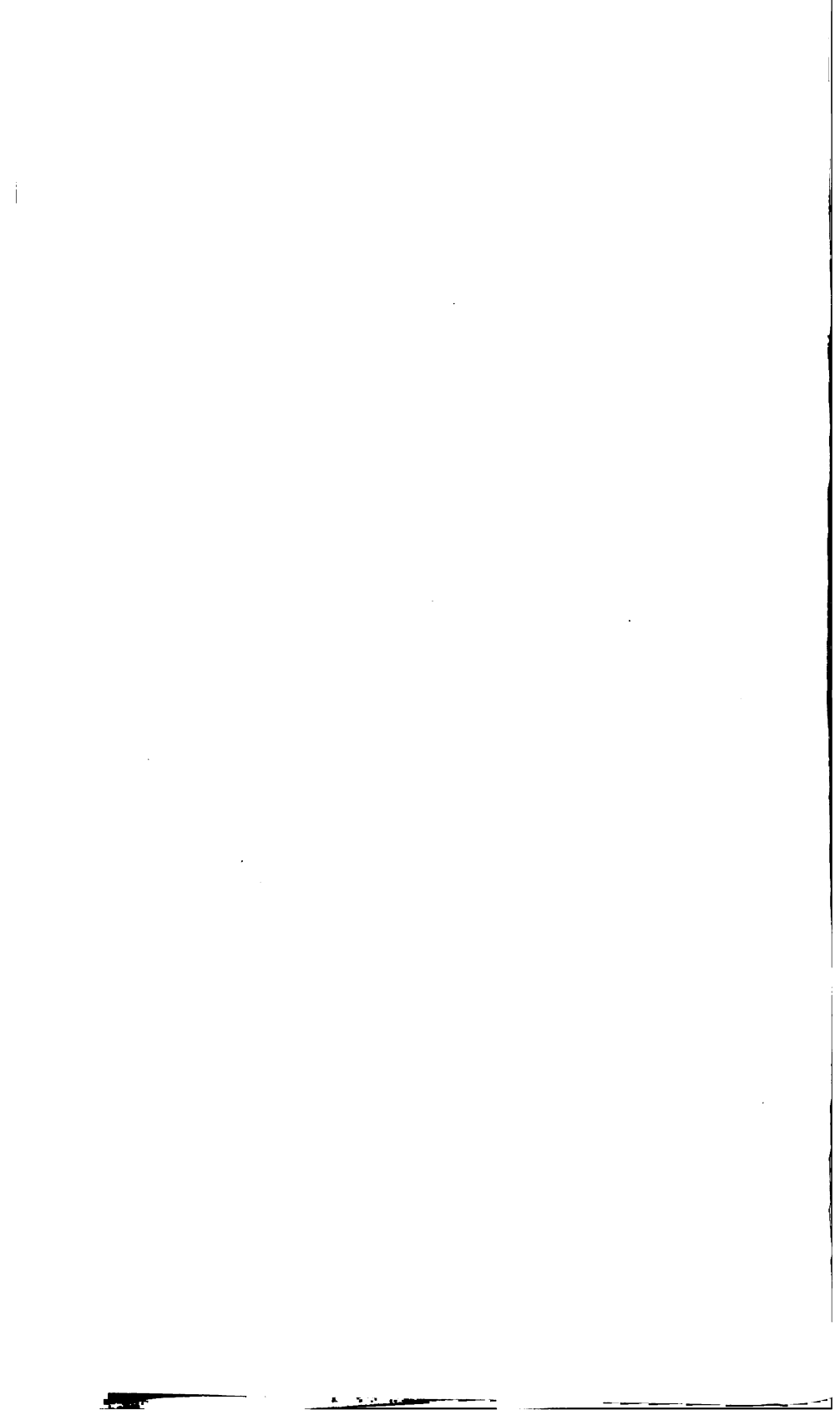
When applied with skillful hands and by intelligent minds, the protection sheet is just as easy for the patient as the blanket with which the babe is wrapped and swathed in its cradle. But in the hands of unskilled workers, it may be applied in such a way as to become harsh, irritating and injurious.

All things have their uses and abuses. It would not be a good thing to dispense with the railroad, the steamboat, or the telegraph because somebody misapplies some of the forces therein involved, and, through carelessness or neglect, causes an accident in which somebody else gets killed or hurt. Bars are harsh; bolts

* Public Statutes, Mass., chap. 87, sec. 26.



HOSPITAL ANNEX NO. 2, FIRST HALL.



are harsh; the separation of the insane from their friends sometimes seems harsh; and the restraints which are necessarily thrown about the violent and intractable insane have sometimes a harsh appearance to the casual observer. Even the hands of a trained nurse may be harshly applied to the sick insane unless those hands are directed by sympathetic hearts—hearts which are stirred to action by generous, kindly and noble impulses.

We should seek to make the application for the cure and treatment of the insane as free from harshness as possible. This can only be accomplished by philanthropic souls working with cultured minds and well-trained muscles—each fibre and purpose acting under golden rules.

Medical Essays.

In addition to my own essay upon Degeneration and Regeneration, and remarks upon other topics which appear in the body of this report, I shall present the following essays written by members of the staff during the past year, and attached herewith as a part of the work of the year. These essays are largely the outgrowth of clinical observations:

Circular Insanity.—Dr. Allen.

Alcoholic Inebriety.—Dr. Kinney.

Separate Hospital Treatment for the Epileptic Insane.—Dr. Arthur.

Dietetics for the Insane.—Dr. Ashley.

Insanity in Young Women.—Dr. Barrus.

Contributions to the General Etiology and Pathology of the Insane.—Dr. Hrdlicka.

Twenty Autopsies on the Insane.—Dr. Hrdlicka.

It seems to me appropriate that all the researches of each year in each hospital should be incorporated in the annual report, and that especial attention should be given to dissertations upon practical medical topics. These essays should be based upon clinical experience and observation. In that way the reports would become invaluable to the profession. At any rate, the members of the medical staff would thus be kept busy as students and writers during their spare moments. The members of each staff would thus be encouraged to read, and investigate, and study, and

make extended researches, and to put their thoughts upon paper in such a way as to disclose intelligence, zeal, energy, and literary taste. A man who is writing an essay that will be read and criticised by somebody else will work harder, and will take more interest in his work, and will become more of an enthusiast in the performance of medical duty than he who simply performs a routine task each day, and does not try to give to others the benefit of his observations and investigations.

The reports of the West Riding Asylum, in England, became famous because the medical men in that asylum sought to present medical facts, and theories, and deductions each year in the report. While we may not be able to do as well as the authors of the West Riding reports, we may at least develop an interest in our work, and in that way excite the favorable comment of those who are glad to behold zeal and enthusiasm in any field of human exertion.

In 1892 some members of my staff contributed essays for the report; in 1893 this custom was continued; and in 1894 each member of the staff presented a paper for this purpose. We are glad to note the fact that our brilliant and distinguished friend, Dr. Peter M. Wise, superintendent of the St. Lawrence State Hospital, Ogdensburg, has imitated our example during the past year, and produced a report that is filled with able and interesting essays by himself and the members of his medical household. We hope that other superintendents will likewise imitate the example set by the staff of this hospital in 1892-3-4, and furnish something of medical interest in each future annual report of the institution to which they belong.

We do not claim any originality in this matter of publishing medical essays in the annual report. Our first observation of this kind was made in 1888, when we secured a copy of the report of the large public asylum at Meerenburg, near Harlem, in Holland. We thought it was a good idea, and we put it into execution as soon as practicable. It is frequently best to meditate upon a plan four or five years before putting it to a practical test.

Acknowledgments.

We desire to acknowledge our continued obligations to the Commissioners in Lunacy for all valuable suggestions they have made, and for the allotments for improvements which have been allowed.

We desire to record our appreciation of the long-continued kindness and courtesy which have been bestowed upon the Medical Superintendent by the Board of Trustees. But for their moral support, and generous encouragement, and sustaining influence, my strength and courage would have failed long ago. Your advice has always been heeded, and your approval of my work has been to me the loftiest of inspirations.

I desire to express my sincere appreciation to the members of the medical staff for their fidelity and perseverance during the semester of another twelve months. And to all the workers, in every branch and department of this institution, from the highest to the lowest, I wish to express my thanks for every act of kindness to the sick, and for every duty promptly, patiently, intelligently, and successfully performed. To each one I may say: Your work is appreciated by those who know it; and you have within yourselves the consolation of knowing that duty well performed brings the highest earthly happiness, and the most serene contentment of mind.

We are under obligations to the editors and proprietors of the Middletown Press, the Middletown Argus, and the Middletown Times; the Independent Republican, of Goshen; the Warwick Advertiser; the Tri-States Union, of Port Jervis; the Gazette, of Port Jervis, and the New York Medical Times, for the generous donation, during another year, of papers and periodicals to our patients.

The following named gentlemen have ministered to the spiritual wants and necessities of our patients during the past year:

Reverend Father McClancy, Reverend Father Butler, Reverend David J. Evans, Reverend Dr. Gordon, Reverend Dr. Robinson, Reverend Dr. Beattie, Reverend Dr. Wilson, Reverend John Cochran, and Reverend Messrs. Heath and Norris.

We also remember with gratitude the organists and choirs of

the various churches for the eloquent and inspiring music which they have furnished to our patients from Sabbath to Sabbath.

We thank our Heavenly Father for a continuance of His protecting care, and implore His guidance and sustaining strength throughout the toils and vicissitudes of the coming future.

Very respectfully submitted,

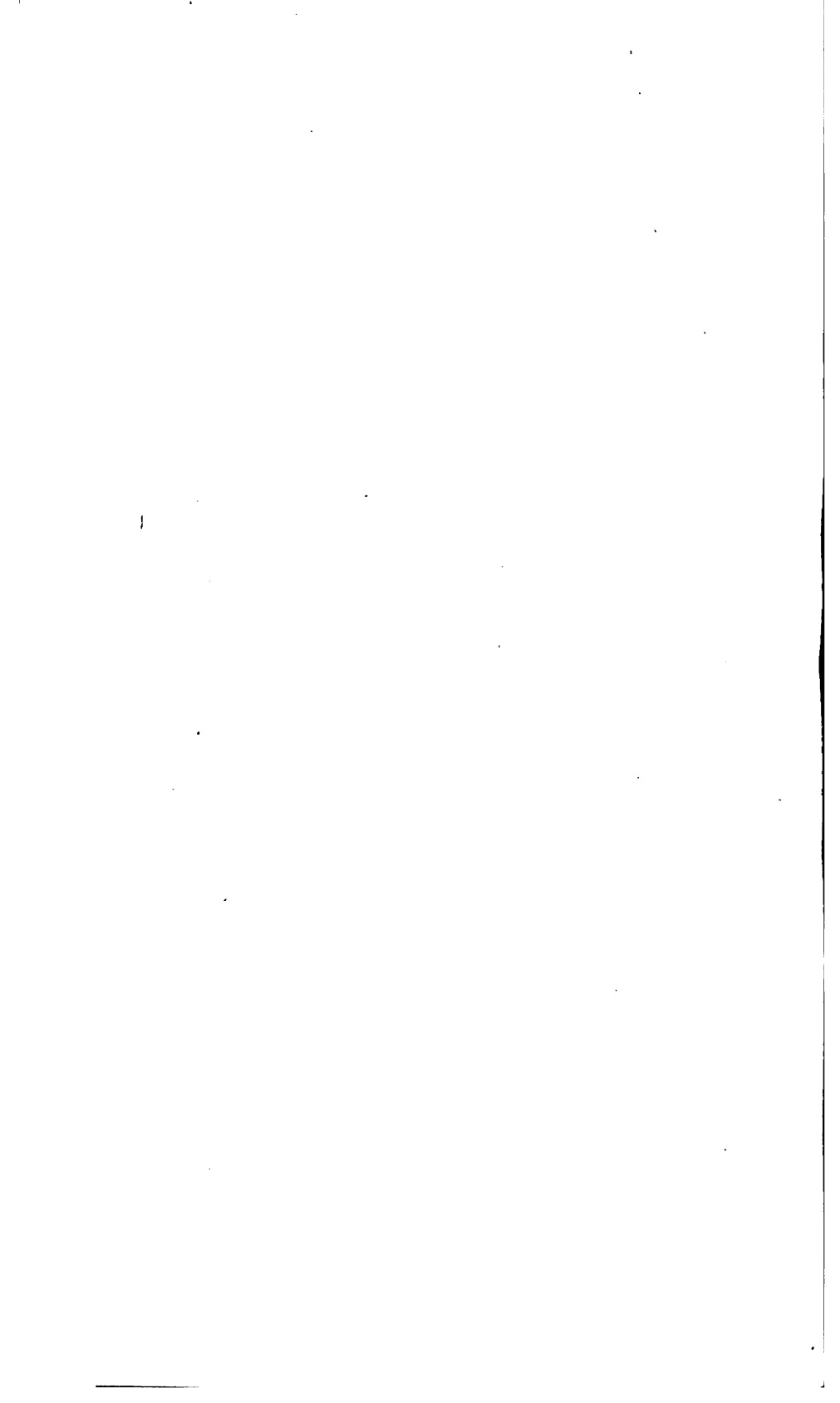
SELDEN HAINES TALCOTT,

Medical Superintendent.

Medical Essays, Clinical Observations and
Pathological Researches,

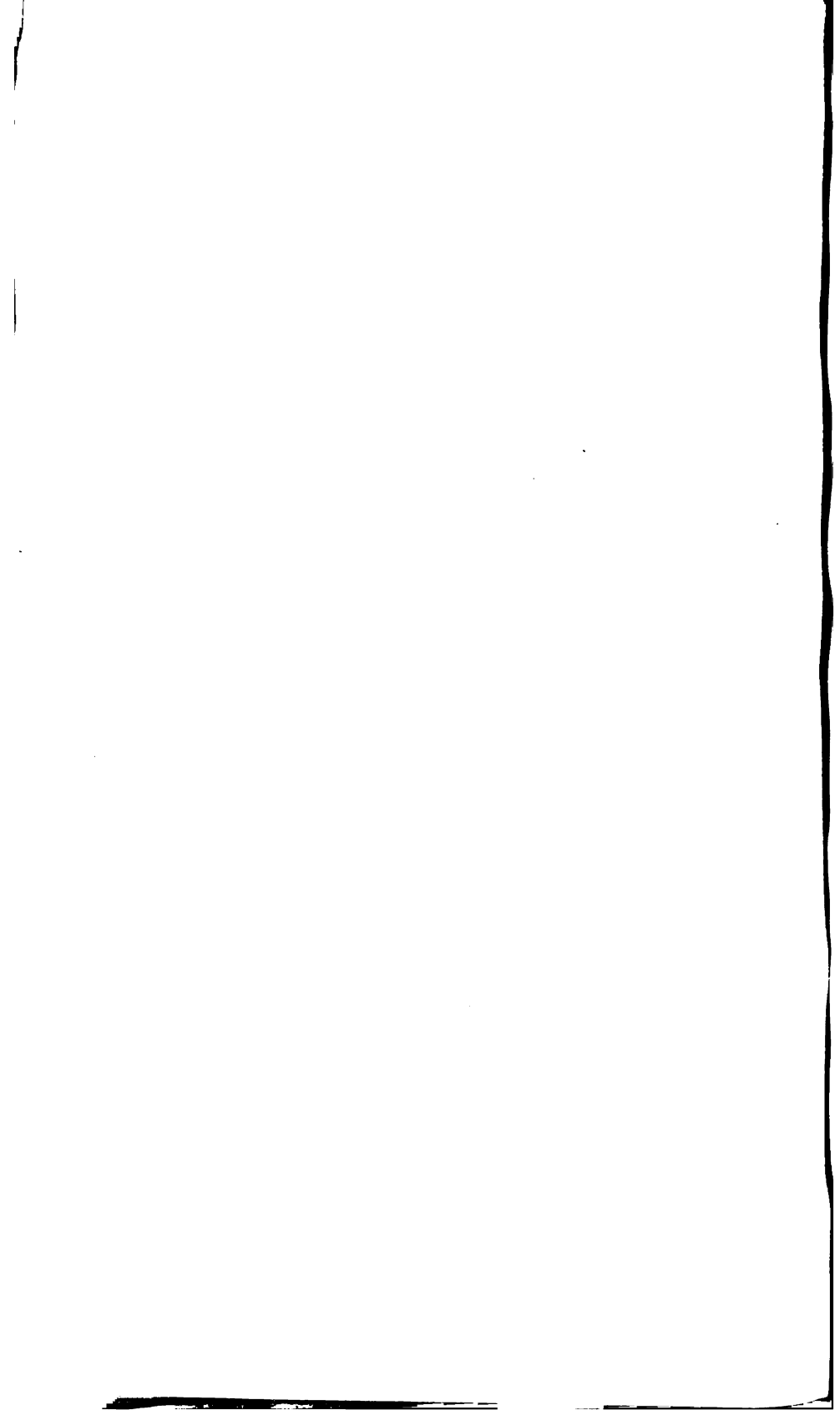
BY

MEMBERS OF THE MEDICAL STAFF.





TALCOTT HALL.



CIRCULAR INSANITY.

By GEORGE ALLEN, M. D.

We observe in nature a tendency to the appearance in alternation of extremely opposed conditions. Night alternates with day, winter with summer, fruitfulness with barrenness, action is followed by reaction. In the emotional sphere, joy is apt to be followed by gloom, and elation of spirits by mental depression. The old lady was a close observer who said: "I now feel well, but this very fact makes me feel badly because I know I shall soon feel worse." Emerson calls it "compensation," but whether he is correct or not the fact remains. Action and reaction are equal—excess produces defect, and defect excess. Clouds and sunshine appear in the natural world, and their types enter into most lives. In some individuals the mercurial temperament is more marked than in others. Such persons are either in the clouds, or in the "slough of despond;" there is no middle ground of mental equilibrium. The crest of the wave is followed by the trough, and the winds and currents which ruffle their mental surfaces are never still, and, like the tides, the ebb and flow of hope and despair make up their history.

This alternation of extremes in mental states, which characterizes mankind generally, finds no exception among the mentally diseased, but among the insane also mental states alternate between the heights of elation and the depths of depression; and we designate these opposing conditions mania and melancholia.

When a man is insanely exalted, we say he is suffering from mania; when he is insanely depressed, we say he is suffering from

melancholia; and when he has both these insane conditions in well marked stages, and following each other in regular rotation, separated by a longer or shorter period of calm, or a somewhat rational state, we name his disorder "Circular Insanity."

This disease (first described by the French alienists, Baillarger and Falret) includes a considerable number of well marked cases, and in a modified form might include still others, perhaps not entirely typical. Most cases of mania, for example, are preceded by a period of depression, more or less pronounced, and of varying duration; and cases of melancholia are often preceded by excesses indicative of an unnatural exaltation of mind. In a certain number of cases, however, this alternating tendency is so pronounced as to constitute the essential feature of the disease — a vicious cycle being established, in whose circling eddies the unfortunate victim floats as helpless as the shipwrecked sailor amid the seething billows of the maelstrom.

The patient who suffers from circular insanity is usually a victim of heredity. His ancestors have been insane or neurotic, and he enters life with a degenerative inheritance strongly predisposing him to insanity.

Max Nordau, in his recent work on "Degeneration," characterizes as "Circulaires" certain degenerates who stand high in the so-called literary world at the present day, and who rank as writers of undoubted merit, but who alternate between conditions of excitement characterized by "impulses to misdeeds and blasphemous language, and dejection with paroxysms of contrition and piety."

The disease usually manifests itself early in life. Puberty, one of the great danger points in the developmental history of the individual, is ordinarily the time when the first outbreak occurs. While either condition may take priority of appearance a majority of cases begin with mental depression. This depression may assume a degree similar to that manifested by (1) simple melancholia without delusions; (2) melancholia proper with delusions; or (3) melancholia with stupor. Usually, however, the melancholia is of the simple variety, consisting of a greater or

less degree of depression, both in the mental and physical spheres. The patient is sad, listless, never smiles, sleeps poorly, can not occupy himself in any manner, frequently is unable to dress or undress himself, does not bathe or eat willingly, despairs of recovery, worries constantly, wrings the hands, often bites or picks his fingers until they bleed, avoids company, walks up and down in a slow but restless manner, has a worried look, and a sad expression of countenance. The body is apt to emaciate, the skin is dry and harsh, the finger nails brittle, tongue furred, the breath offensive, the eyes dull and listless, the bowels sluggish and inactive, and all the secretions diminished. When questioned, he refuses to speak much, or describes his distress in a vague and unsatisfactory manner. He realizes all his shortcomings; he is a miserable creature, unable to do or say anything properly. All effort seems so magnitudinous that the thought of it induces despair. His days are passed in misery, and his nights are filled with woe. To this picture may be added insane delusions, and the patient entertains false beliefs that add to his misery. The belief that he is lost, and that salvation is denied him is a common delusion in melancholia. Or the belief that he suffers from some loathesome disease may torment the patient. To these may be added suicidal impulses, which impel to self-destruction; or the sufferings of the victim may be such that death is sought as a relief to the terrible agony that racks his soul. Suicide is, however, less common in this than other forms of melancholia.

Again the delusions may be so frightful or overpowering in their nature as to render the person speechless, so that he lies fixed and motionless in one position, with closed eyes, or perhaps gazing fixedly in one direction, making no move to help himself or others; retaining his excretions, or passing them in his clothing or the bed, as the case may be; refusing food, and remaining rigid, or resisting in an aimless way everything that is done for him, and thus completing the picture of that profound form of disease known as melancholia attonita.

From any of the various degrees of melancholia described, the patient may pass into the extreme opposite condition — mental.

exaltation or mania. The change is usually a sudden one. Sometimes the patient goes to bed at night in a condition of melancholia, and awakes in a condition of mania. From extreme sadness to extreme jollity is but a step. Maudsley says : "Joy and grief evidently lie very near one another in the region of molecular physics ; a very little difference of motion makes the difference between the one and the other." And so, that the patient with circular insanity is in the depths of melancholia to-day is by no means an evidence that he may not reach the heights of mania before to-morrow dawns.

The mania which characterizes circular insanity has usually less of the incoherence and delirium which characterizes acute mania proper, and is characterized rather by an exaggerated and abnormal activity of all the mental faculties. The intellect, the sensibilities, and the will are all unduly active. A superficial examination might fail to disclose evidences of insanity at this stage, and yet, if carefully compared with the patient in his known normal condition, a great difference is seen. These patients are very selfwilled. If not allowed to have their own way they are very troublesome, and pursue those who oppose them with extreme malignity. They are strangers to truth, and stop at no falsehood that will serve their purpose. In asylums, they concoct the most malicious falsehoods against nurses who attend them. They are crafty, and so frame their complaints by a judicious admixture of actual facts as to give a semblance of truth to the greatest lies. They will often incite weakminded patients to acts which they dare not attempt themselves, and in the general concoction of mischief, combined with malice, these cases in this stage of their malady are without equals in the whole range of insanity. They are addicted to all vices ; are destructive, profane, obscene, and may be homicidal. They seem totally devoid of all moral sense or shame on account of their misdeeds. Detection in one offense has no restraining effect in future. They are devoid of natural affection, and have no respect whatever for the feelings of others. An intense and overmastering restlessness seems to keep their abnormally acute faculties con-

tinually at work inventing new methods of mischief and annoyance. Nothing but personal acquaintance with such cases will enable one to believe the extent to which the insane vagaries of these patients will lead them. None of the crimes of the decalogue would phase one of them for a moment if the impulse moved, and the opportunity offered.

In a few cases the mania may assume a form characterized by incoherence, noise, excitement, and great bodily activity as in acute mania proper; but the most characteristic form is that previously described, in which all the faculties rendered over-acute by disease drive the victim, with a purpose and determination that seems almost sane but devilish, to the commission of acts of mischief.

Following this stage of the disease, which gradually subsides in the activity of its manifestations, there may appear a period of comparative reason—a return of the individual to his normal mental status, or near it. This so-called “lucid interval” is rarely a complete restoration of the mental faculties. Those who know the patient best will note in his speech and conduct evidences of his mental aberration, and often the so-called lucid interval is only a sort of lull in the psychic storm before the wind changes its direction from one extreme of the mental compass to the other, replacing the thermic gusts of mania by the frigid blasts of melancholia. In such a case the lull is of short duration; the apparent recovery is speedily followed by relapse, and the patient is soon again suffering the horrors of the melancholic stage of the disease. Thus the cycle is completed only to repeat itself, and once established the various stages tend to recur thereafter with more or less regularity. The disease may manifest its stages in the order described, or the mania appear as the first stage, and the melancholia follow. The lucid interval may vary in its extent of duration from a mere interval scarcely observable, to several months, or even a year. It is manifest that one cannot be sure of his diagnosis of this affection without an observation of all its stages, and, too, it is usually necessary to observe the manifestation of more than one cycle before certainty can be assured. For,

an attack of melancholia might terminate in recovery, and after an interval of health an attack of mania upon proper exciting cause might supervene, and as yet the vicious cycle not having been firmly established the diagnosis of circular mania would not be justifiable. Only after two or more complete cycles of the disease have been witnessed is the diagnosis sure.

The termination of the disease, when firmly established, is usually in chronicity. Dementia is rare, and only occurs in a few cases after many years. The bodily health does not suffer, as a rule, and death is more likely to occur from some intercurrent physical ailment than from the mental disease.

It is important to recognize this disease, for the reason that its prognosis is decidedly unfavorable, while the prognosis of mania and melancholia, when not combined in the stages of this vicious cycle, is, perhaps, as favorable as in any form of insanity. From a forensic standpoint, too, the disease should be recognized, because the physician's testimony may be needed to protect the patient from the results of his insane acts. During the maniacal stage, acts may be committed which render the patient amenable to the law, and they are often committed with such a show of method and reason as to deceive any but a skilled observer, who recognizes the true nature of the disease. Then, too, the physician may be called upon for an opinion as to the competency of certain legal acts done during the so-called lucid stage of the disease — the conveyance or purchase of property, testamentary acts, etc. In such cases, only a thorough acquaintance with the patient in his normal, as well as his diseased condition, will enable one to speak authoritatively. It may be questioned if there ever occurs a complete intermission, during which the patient is in a condition of perfect mental health. That he is much better may be granted, and certain patients during this period may perform certain rational acts in an extremely rational manner, but all such acts should be most carefully scrutinized in all their bearings, and if the act in question does not harmonize with what would be the natural, sane act of a sane man under the same circumstances, its sanity should be seriously questioned. The greatest care should,

therefore, be exercised by the physician under these circumstances, that he may secure to his patient every legal right, and yet do no wrong to others whose interests may be involved.

Among the predisposing causes of circular insanity, heredity holds the chief place, while cerebral traumatism, hysteria and epilepsy may also predispose to the disease. The exciting causes are the same as those that induce other forms of insanity. It is probable, however, that heredity and neuro-degeneration form a faulty physical basis upon which the disease develops in most cases; and it is this fact which renders the disease so slightly amenable to treatment, and of such unfavorable prognosis.

The following cases from the records of the Middletown State Homeopathic Hospital, are illustrative of circular insanity:

Case 1. Female; admitted in 1880; age, 16.

She had then had melancholia for about a year. Trouble began with puberty. Father insane; form unknown, but chronic. Uncle insane and suicidal. During residence in the hospital, melancholia disappeared, and she became maniacal, her mania presenting the features characteristic of circular mania.

The following notes are from her case history: "Talkative, irritable, impudent, and full of complaints. Full of mischief; would not go to bed; talking, laughing, very impudent. Destructive, filthy, impudent, noisy, talkative, profane; takes off her clothing; treacherous, fiery, destructive, swears, obscene. Because she was not allowed to attend a dance she swore, and threw chairs about. Bothers other patients, and when attendants speak to her she becomes excited and fights. Can write a sensible letter, but seems filled with mischief and cunning."

This condition continued—alternating from time to time with periods of depression—for two years, when she seemed so well that she was allowed to go home. This patient did not again appear at the hospital till ten years later, when she returned in the old maniacal condition, and with a history that could not be accurately traced of having been in several asylums during the interval, and of having lived as a prostitute, a mistress, and a

wife during the intervals when she was free from custody. Her last attack had followed shortly after removal of ovaries, and assumed the form of melancholia. After several months in this condition she became maniacal, and was so troublesome that she could not be kept in the private asylum where she then was, and was again brought to the Middletown State Homeopathic Hospital. Here she continued her noise, profanity, obscenity, mischief and malice as before, aggravated, if possible, by her experience and longer acquaintance with vicious practices. There was no language too vile, no falsehood too malicious, no act too mean for her to indulge in, and yet when it served her purpose she could be sweet and affectionate of disposition, polite and ladylike in manner, and express what appeared like real sorrow and repentance for her misdeeds. But she was absolutely untrustworthy, and exhibited these repentant phases only for a purpose. After a time she again improved, and an interval of return to reason supervened; so sane did she appear that an expert of large experience in New York city pronounced her well, and complimented the hospital on this most excellent cure. After an absence of about five months, during which time she is said to have conducted herself thoroughly well, she returned to the hospital in a condition of melancholia. She is still under treatment, and has not changed at all since admission—a period of about ten months. She is quiet, eats and sleeps poorly, is always sad and depressed, but without permanent delusions. At any time she is again likely to become maniacal, and repeat all the mischievous and malicious acts which have characterized her previous outbreaks. This is a typical case of circular insanity—occurring in a girl with insane heredity, appearing at puberty, presenting in rotation the characteristic states of melancholia, mania, and a quiet, rational, or nearly rational interval. Ovariectomy failed to relieve her mental condition in the least. Treatment has been of no avail, and her outlook is discouraging. Her mental faculties seem unimpaired, and yet, except for short intervals, she will probably have to remain in custody during the balance of her life.

Case 2. Female; unmarried; age, 40; father was insane, and a brother has melancholia.

On admission she was said to have been in a condition of melancholia for about two years. The exciting cause said to have been death of relatives. Her melancholia was of the simple variety—sad expression, unable to occupy herself in any way, says she is “heart sick,” etc. Was admitted in September, 1887, and continued depressed until October, 1888, when she was removed by her family; was at the time considerably improved, but not well. During an absence from the hospital she improved somewhat, and conducted herself fairly well for nearly three months, when she became maniacal, and was returned. She was noisy, profane, abusive, mischievous, malicious, filthy, and obscene, and presented all the features characteristic of this form of insanity. This condition lasted for about two years, when she had a very brief semi-rational interval for a very short time, quickly lapsing into melancholia, with a repetition of her former symptoms. This condition lasted for about three years, and gradually subsided, so that she left the hospital on parole with a nurse, and remained in a boarding-house for nearly a year, during the time improving gradually, but at no time entirely well. In March of the present year she again returned to the hospital in a maniacal condition, and so remains at present. Thus, during a period of eight years this patient has had two long attacks of melancholia, and one long attack of mania, and has entered upon the second maniacal period. Between these attacks she has enjoyed a respite of comparative sanity. She comes from insane stock, and will probably never recover. Her intellect when at her best is but little impaired.

Case three is that of a man who was admitted at the age of 53, and who suffered from circular insanity till his death—a period of over twenty years. During all this period he went from melancholia into mania, with but short lucid intervals, and at no time was his condition such as to warrant his residence outside the hospital for even a short period. This case was complicated with progressive muscular atrophy which, while it rendered the patient more helpless, did not appear to modify the mental disorder.

Case four is that of a clergyman of an unfortunate mental and nervous heredity. An otherwise brilliant and valuable life has in this case been rendered useless by the recurrence of the cycles of circular insanity. The lucid intervals in this case have been of sufficient length to permit of his return to his home and the resumption of some useful occupation, which, however, he is soon obliged to abandon on account of the re-appearance of his malady. It is pitiful to witness this refined and scholarly man during his sane moments ; thoroughly understanding his situation, anxious for an opportunity to do something in life for himself, his family, and his fellow men, and yet realizing that he is rendered powerless by his malady, whose oft-recurring cycles have palsied his best efforts.

Case five is that of a young woman who has recently left the hospital. Prolonged attacks of melancholia, with depression amounting almost to stupor, and at times attended by suicidal impulses, change suddenly in this case, often in a single night, to attacks of violent mania. The patient, who is naturally quiet, retiring, modest and ladylike, becomes almost in a moment a screaming, swearing, violent and immodest maniac. The "lucid intervals" have for the most part been very brief, and the cycles have already been many times repeated, so it is doubtful if their vicious tendency to recurrence can be broken up. She is now living with her friends at home, enjoying as best she can a more than usually prolonged sane interval.

Case six is that of a bright girl of 20, who came to the hospital suffering from melancholia, which proved particularly obstinate, and yielded in no particular to treatment. She has suddenly become more grave by change of the disease to mania, whose features are characteristic of the type peculiar to circular insanity. While this case has thus far shown but one alternation of symptoms between melancholia and mania, yet this fact alone has increased the gravity of the prognosis. Better a year of melancholia or of mania, than a much shorter period of the two combined, and alternating in the same patient.

These cases are perhaps sufficient to call attention to the

characteristic features of this disease. Many cases, though treated in asylums, are not recognized, because upon the appearance of a somewhat rational interval they are discharged as recovered, and upon the reappearance of the malady they are taken to another institution, or perhaps kept at home, and it may be only after the lapse of a number of years that sufficient evidence accumulates in the experience of a single physician to warrant a diagnosis.

It is difficult to say what it is that induces primarily the alternating tendency of this disease, but once established the tendency is marked and very persistent. Treatment should, therefore, be carefully directed toward the prevention of the establishment of this vicious cycle ; especially should care be exercised in cases of melancholia or of mania occurring in degenerate stock, or having an insane heredity. Removal from accustomed surroundings, complete change of scene, regular life, careful diet, rest, and proper medication should be provided. Quinine has been used on account of its supposed adaptability to intermittent diseases of all kinds, but it is doubtful whether it is of value here. As we do not know of any remedy that is homoeopathic to the entire cycle, such remedies should be administered as most nearly correspond to the status praesens.

ALCOHOLIC INEBRIETY.

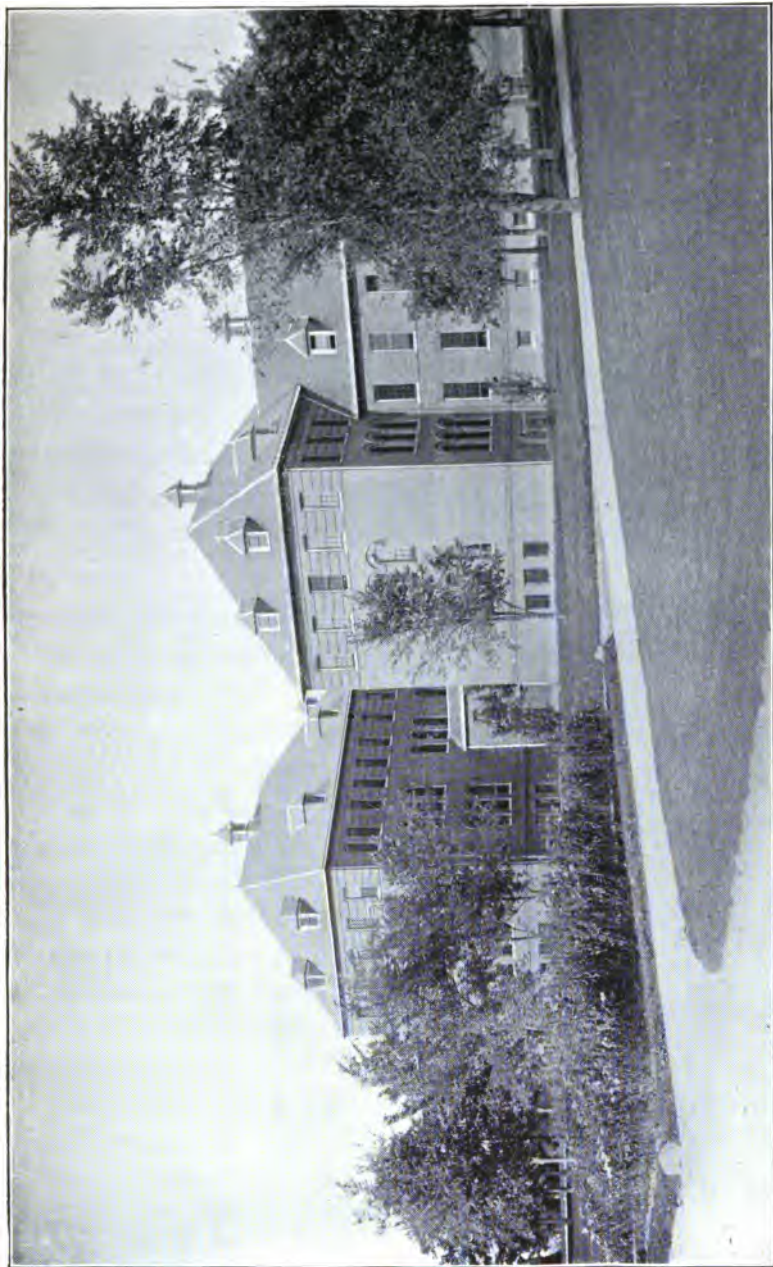
By C. SPENCER KINNEY, M. D.

To those who delight in the employment of statistics to emphasize the importance of the points under consideration and prove the truth of their deductions, the study of alcoholic inebriety is not very satisfactory.

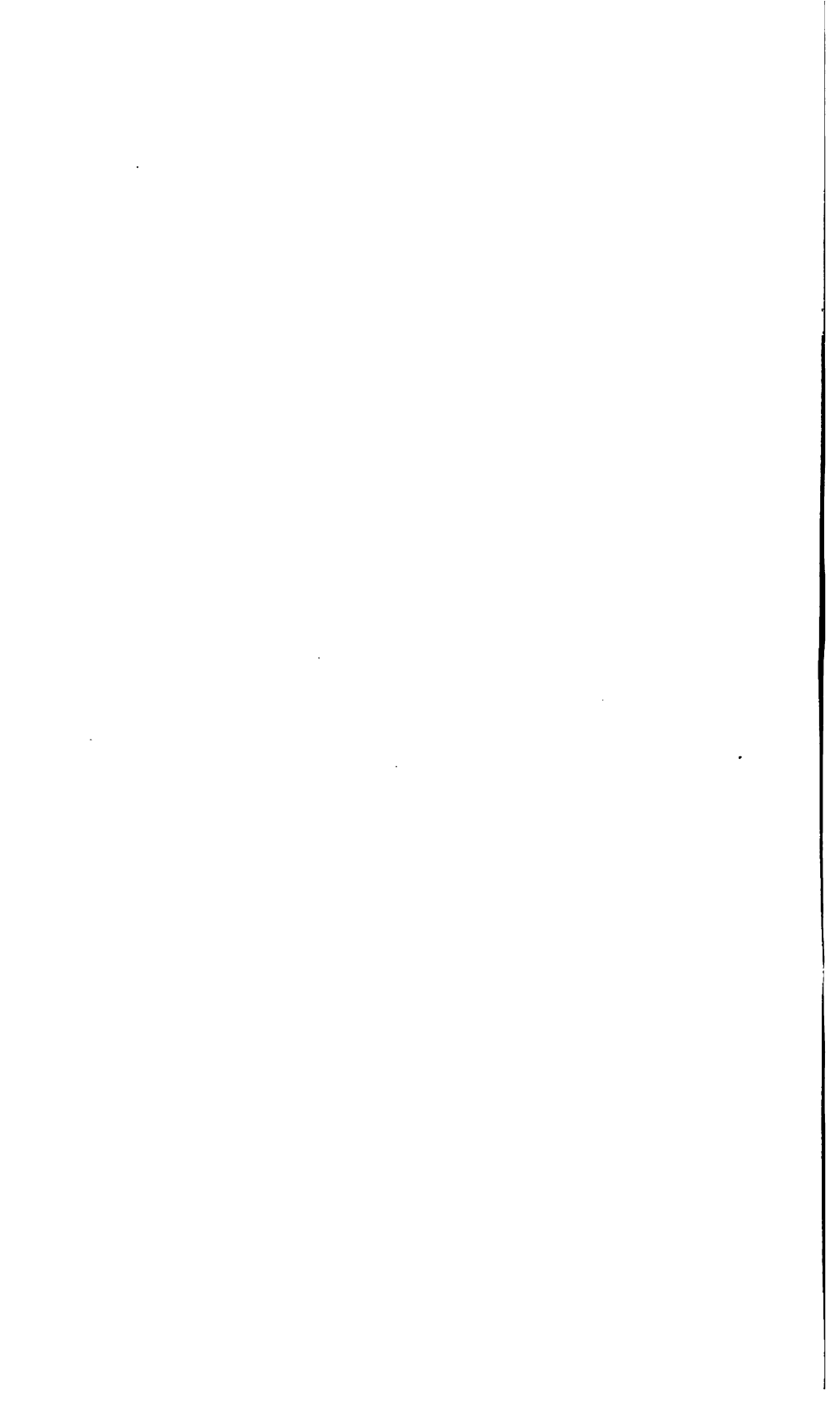
The statistics are too confusing. They are modified by ignorance and indifference; they are distorted by prejudice and cunning, and suppressed by the pride and conceit of those whose duty it is to give information on the reception of the patient for medical treatment.

It appears about impossible to view the alcoholic inebriate from anything but a sentimental standpoint. Some reformer whose philanthropic eyes have never seen the sun except when at the zenith, starts the story that eighty per cent. of crime and insanity has its origin in the use of distilled liquor, and every printing press in the country is at once engaged to educate the masses on this interesting point.

That intemperance in the use of alcoholic liquors entails misery to the living and the unborn, no one can deny. As no two human beings are constructed on precisely the same lines, we cannot expect that they will endure the same strain with equal degrees of resistance. When a man is suddenly subjected to any great physical or mental depression he must thank his heredity for the consequent result; whether he acts on the impulse of the moment and blows out his brains, or drowns his grief in the fabled oblivion found from drink, or whether he bends and not breaks, and quietly resumes his proper relationship in life.



HOSPITAL ANNEXES NOS. 1 AND 2.



An inherited predisposition that is shown by a peculiar neurotic temperament, coupled with unfortunate early companionship, leads many into the well-worn path trod by the alcoholic inebriate.

Emotional overstrains, like worry and grief, may lead some to inebriety; while physical disease, or injury to the head, may induce others to fall.

That eminent English authority on inebriety, Dr. Norman Kerr, claims that eighty-seven per cent. of his cases have been of a nervous temperament. I think that this is not far from the proportion that we find in the United States.

Regarding the nativity of cases of alcoholic inebriety, we find that they are usually in the following order of frequency:

- (1) United States.
- (2) Ireland.
- (3) England.
- (4) Germany.

The proportion varies, of course, according to the nationality of the district supplying the patients.

The ingenuity of many writers has developed singular facts from the causes leading to alcoholic inebriety. Perhaps some of these simply illustrate the meeting of the extremes in nearly all conditions of life.

Alcoholic inebriety claims most of its wrecks from the believers in the Christian religion, Protestant as well as Romanist, educated as well as unlearned. The Jewish race in England, as well as in the United States, is singularly exempt from the vices of drink, while the followers of Buddha and Mohammed put us to shame by their immunity from this induced disease.

Dr. Kerr, in speaking of this condition, says: "As a whole, Anglo-Saxons seems to be more prone to this disease than any other race; but the Russians, the Swedes, the Belgians, the Germans, the Swiss, the French and the Austrians seem to be steadily coming up to the English and the Americans. In this statement I am not referring to acts of drunkenness, but to the overpowering impulse to intoxication, the disease of inebriety or

narcomania. It is interesting to note that as Jews carry their sobriety into every country (some parts of Russia excepted), so do the Anglo-Saxons carry their insobriety all over the world. We British are the finest colonist extant, but to our shame be it recorded, our triumphant march over the inhabitable globe has been marked by a disgraceful and damning trail of alcoholic drunkenness, destruction, and death. Our demoralization and decimation of native races by the drinking habits which we have taught them, are a hideous blot on the escutcheon of our fame, a reproach to us as a people, a dishonor to us as a civilized nation." (P. 132.)

Alcoholic inebriety is a constitutional disease of the higher nervous system, caused by continued indulgence in alcoholic liquors.

At different vantage grounds of observation, an alcoholic inebriate presents a view of diverse proportions. To the moralist, a self-constituted and self-perpetuating sinner stands out silhouetted against the light of his "might have beens." According to the moralist, all that is required is a change of habit—a dropping of old associations and methods of living; not alone a change of heart, but a complete revolution of the individual's mental and moral life. In theory, these views are good, and cover the case with nebulous possibilities. To be sure, these views are entertained to a greater or less degree by all who have considered this subject. They represent themselves boldly when we state causes, and they insist on recognition in the management and treatment of the disease.

To the judicial mind, the alcoholic inebriate represents vice. He is a self-seeking despoiler of his own prospects, and of his family's happiness, and stands in need of the law's disciplinary, "Ten dollars, or ten days."

To the physician, who watches the changes taking place in the one who is gradually yielding to habitual inebriety, there is but one conclusion to be satisfactorily reached, when viewed in the light of cause and effect, and that is — that it is a disease. As proof, he may state his post-mortem findings in the congested stomach, the nutmeg liver, the degenerated kidneys, the fatty,

flabby and weak heart, and atrophied brain, shrunken membranes, hypertrophied neuroglia, atheromatous and tortuous vessels, with shrunken and distorted brain cells, as shown by microscopic examination.

The action of alcohol on nervous tissue is able and does produce as great degenerative change in the physical and moral strength of the drinker, and results in as much of a disease as is found in terminal dementia or chronic dyspepsia.

If the physician should be in doubt whether the disease has progressed far enough to be called insanity, let him stand the inebriate up alongside of this definition of insanity, and see if it fits: "Insanity is the prolonged departure from the state of feeling, and methods of thinking usual to the individual when in health, as a result of disease of the brain." Through the possession of a neurotic taint, there are some predisposed to the drink habit, with whom bad company and bad advice are in the train of first steps, and an occasional indulgence degenerates into a habit. It does not stop there, but goes beyond that stage, and, taking deeper pathological hold, becomes a disease over which the patient has only a limited control, owing to the toxical enfeeblement of his mental faculties.

The full and free public consideration which this subject has had through the newspaper and magazine press during the past five years, has been productive of benefit in educating the masses to a more intelligent comprehension of this disease.

What the alcoholic inebriate needs is proper medical treatment, and until he has had this we can not feel at all sure what practical use to himself or to society it is possible to make of him. When a man's system becomes saturated with liquor from continued drinking, he is in a peculiar physical and mental condition. Physically, he offers to labor and to disease, less than his healthy degree of resistance; for he tires with the one, and succumbs easily to the other. Mentally, his condition is not only peculiar, but lamentable. From the capable, attentive, pleasant, generous yet positive man of business, endowed with clear ideas of his social obligations, you see, traduced by drink, through

various degrees of transformation, the incapable, inattentive, irritable yet vascillating spendthrift, whose ideas are indefinite, and who often becomes possessed of no more originality than an echo. His moral sense becomes obtuse, the corners knocked off to such a degree that his conscience is seldom pricked, and there is scarcely a day in which he does not attribute blame to others for a condition in which he has industriously labored to place himself. This state leads to thoughts of suspicion of those about him and depression of spirit, until judgment is seriously impaired. All these symptoms and more exist, not when the individual is drunk, but when he is free from the immediate effects of drink. There is a change in his normal mental condition, and while he may not be considered insane by those who seek for delusions, yet his mental strength is enfeebled, and he may be properly called an alcoholic dement. There remains in him no apparent mental elasticity. This condition is as others see him, not as he views it ; and to others who know what his symptoms denote they point to disease. He is willing to admit that his habit is an unfortunate one, but claims he need go no further ; and if he is recovering from a more than usually free indulgence, may promise to stop, may give his word as a man that he will drink no more, and may sign a pledge with such forms of solemnity as seem most fitting to himself or friends ; but the instances are few when these vows are not traced in sand, and the first returning tide of desire finds the resolve effaced. His reason for relapsing would seem nonsenical, were we to consider his situation a result of habit, and not that of an enfeebling mental disease. Two illustrations will suffice: After several days of drunkenness, a gentleman, who was a man of long business experience and superior education, was pressed for a reason for breaking a long continued period of sobriety, at last reluctantly admitted that it was owing to having received a letter from his mother, whom he dearly loved. Another of the same grade of intelligence said it was owing to a desire to see his mother. He began drinking when he first felt this desire, and traveled to the city where his mother lived, avoided the house, and finished drinking in Boston — over

two hundred miles away from home. Neither perceived the foolishness of his excuse, but clung to it as if it were wholly sufficient for his conduct. Coupled with this obtuseness of judgment is a conceit of their mental and moral strength, to which they look for future freedom from the relapses that have been in the past steadily working to wreck their lives. This tendency is shown after a few days of treatment, when the patient imagines he has the whiskey out of him, recalls the possibilities of the past, with the degrading necessity for present treatment, and looks forward to the future and its kaleidoscopic possibilities with no apparent thought that his downfalls are ever to be repeated, and that his pathognomonic story has been told by travelers on his route from all time.

It is with pleasure that I quote Dr. Isaac Ray regarding the state of mind held by the patient: "The restoration of the bodily condition to something like its customary strength and firmness, with all the pleasing sensations which follow such a change, excite no distrust of their power to resist temptation. On the contrary, they are always hopeful, confident, sanguine, and impatient of delay. They say they feel perfectly well, have not the slightest desire for drink, and therefore their further seclusion would be not only unnecessary, but prejudicial to their mental and bodily health. The amazing confidence such persons invariably express in their future security is one of the curious traits of this condition. A great many have come under my observation, but I have never known one, not even of those who had repeatedly fallen and had most deplored their infirmity, to express any apprehension of falling again. On the contrary, from the moment when they begin to resume their proper consciousness until they leave the hospital, the burden of their story is that they are safe forever after; that not the slightest danger exists of their again disregarding the terrible lesson of experience. Instead of returning into the world with fear and trembling, as one would naturally expect to see them, and seizing upon any excuse for postponing the day of trial, they go out eager and jubilant, as if bound on a festive excursion.

"Thus beguiled by a morbid confidence in themselves, they determine to resume their liberty in spite of entreaty and argument and the institution has no power to prevent it. Neither the hospital for the insane nor any asylum for inebriates can hold persons in confinement against their consent, for any other cause than insanity; and though our account of this class of persons does not indicate in them a very healthy condition of mind, yet inasmuch as they are apparently rational after the first day or two, both in conduct and conversation, they cannot be called insane in the ordinary acceptation of the term. While in the paroxysm, or suffering under its immediate effects, they may, very properly, be called insane, and so long they may, unquestionably, be deprived of their liberty, for the purposes of custody or cure. But when this condition shall have passed away, forcible detention in any institution, whatever it may be called, would be clearly a violation of constitutional rights, and would not be sanctioned by the legal tribunals.

"A notion prevails, I am sure, that the inebriate asylum is to be unprovided with bolts, bars, and guards, and no means of detention allowed more forcible than the offices of kindness, good will and love. Respecting this notion it need only be said that it indicates but a school boy's knowledge of human nature, and a still deeper ignorance of that special phase of it which results from long continued irresistible inebriety."

The inebriate has no reason to complain that efforts have not been made from time to time to bring about a reform in his style of living. Probably no treatment for drunkenness has ever been recommended that has not been of some benefit to some one. He has been prayed with and sworn at; he has been treated with loving tenderness, and he has been abused; he has been thrown on the support of his word as a man, and he has bowed his head to the decrees from the bench; he has taken long voyages on water and land, and he has been kept at home; he has been kept from liquors by trusty nurses and relatives, and he has been fed with liquor in every manner that a cunning ingenuity could suggest. What to do with him has puzzled many. When we consider that he is suffer-

ing from a disease, we are on the threshold of learning what can be done for him. About everything that enters into and is a part of him in life and associations becomes a matter of interest when treatment is contemplated.

His ancestry, early training, habits, moral and physical calibre, must be considered in order to determine what kind of material you have on which to begin:

A man who possesses a weak will, but little moral sense of responsibility and a love of low associates can be sobered up; but the length of time he will remain sober depends upon time, place, and circumstances. The chances are that no treatment known will be of permanent benefit to this class of patients. From sobriety to drunkenness they relapse with disheartening regularity, becoming more enfeebled mentally and physically, until they finally represent the driftwood of a community. If the individual has become demented through the effects of long continued liquor drinking it is useless to expect that his mental integrity will be wholly restored; only that portion of the brain that is uninjured by alcohol is going to act in a fairly healthy condition after the most satisfactory of treatments.

Every community has a number of men and some women who are rapidly becoming nothing more or less than shiftless, habitual drunkards. They are useless to themselves and to everybody else, and it is simply a question of time before they become public charges. If they do not become so themselves, their children stand a good chance of being wards of the State in one capacity or another, and this should not be forgotten.

These points are too often overlooked when patients are completing a course of drug treatment for inebriety. Some expect a complete change to occur in the character of the individual—a change making it impossible ever to drink liquor again. Now this is nonsense, born of ignorance of the subject. No treatment is going to benefit permanently one who has no wish to stop drinking, and who prefers to associate with those who do drink. An exasperating condition of affairs awaits the physician who treats these patients. He cannot judge, to begin with, just what the

outcome of the treatment may be. The case that appears favorable in the beginning may relapse quickly, while the one surrounded by doubt may make a good recovery and a return to usefulness after years of spasmodic effort to keep sober have made his friends weary and disgusted. This simply illustrates that the effects of liquor may conceal more will-power, self-control, and judgment than we may be aware of. In favorable cases you may expect one of three results—an improvement, a reformation, or, in number of instances, nothing more or less than a regeneration.

I believe that it is safe to say that about ten per cent. of the patients who are now under treatment in our State hospitals have become insane by the use of distilled liquor. Many of these will go out recovered, and some will never relapse. The majority is likely to break down if circumstances are moderately favorable. Uncomplicated cases of alcoholic inebriety that have reached the stage of insanity will not number in this population of our hospitals more than two (2) per cent. of this number.

The importance of intelligent medical treatment cannot be too strongly urged, and the less they associate with their kind during this time of treatment, the better is their chance of recovery. Otherwise they while away their time during treatment by recounting to each other their past experiences, with a certain amount of fool pride that is little calculated to establish a sound moral tone, or to allow them to use what self-control has not been destroyed by reckless indulgence.

The instability and unreasonableness of the recovering inebriate is similar to that of most of the insane at the same stage. In the inebriate it means, however, a returning craving for drink. When the period is reached in which the immediate effects of liquor have passed away, and the mind has cleared up, the necessity of at once attending to business becomes the one serious wish of his life. It is at this point in his treatment that the foundation is frequently laid for relapse from the liberty allowed him by his medical attendant. In some instances the doctor is led to believe that ruin of the mind, person and estate, with a *habeas corpus* attached, is going to be the result of prolonged custody.

A number of years ago, Dr. Portugaloff, a celebrated Russian physician, used with marked success, a solution of one grain of strychnine to 200 of water, injecting five drops every twenty-four hours. So confident was he of the good results likely to follow, that he recommended the establishment of dispensaries under public control, for the purpose of giving his treatment to those who needed it. This is believed to be a practical and good idea by those who have given the subject of drug treatment a thorough trial.

The single remedies that have been used with success for the treatment of inebriety are: Nux, belladonna, cinchona, capsicum, macrotin, stramonium and veratrum viride, generally in low potencies. It has not been my fortune to see the results that have been said to follow the use of high potencies, for the treatment of inebriety, recommended by the celebrated Dr. Gallavardin.

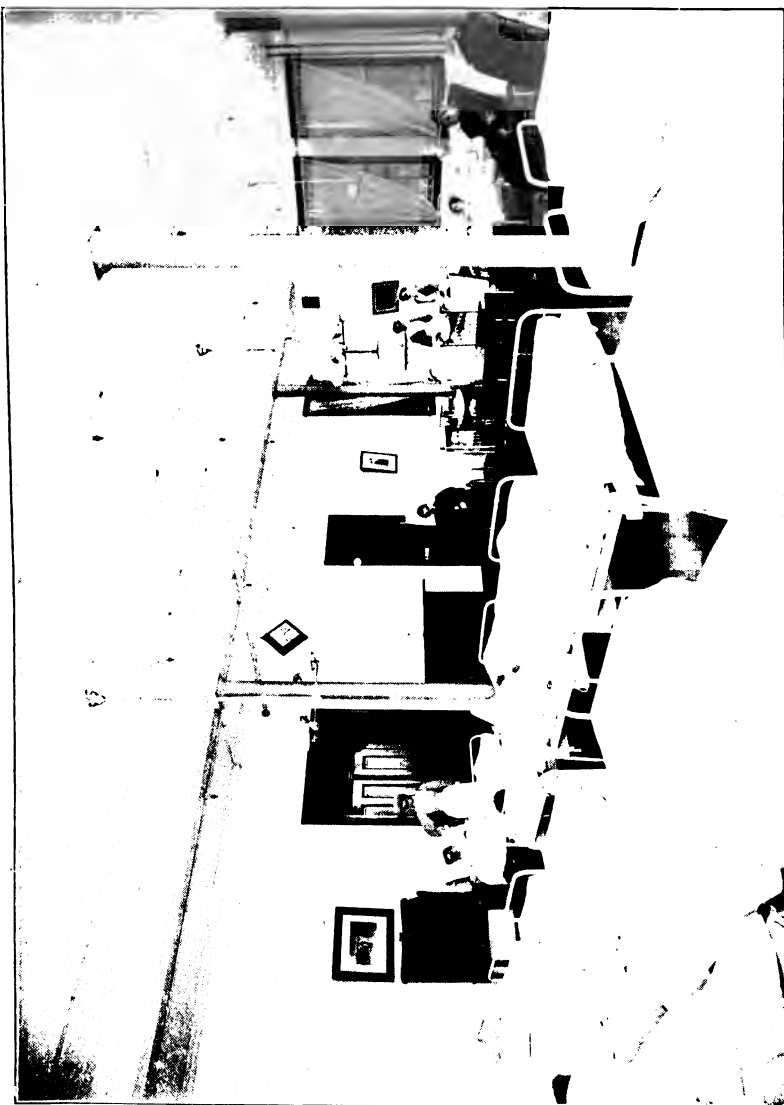
In addition to medicine regularly administered, hot milk at frequent intervals, say every two or three hours, as the condition of the patient demands, should be given, care being taken not to overload the stomach, yet giving it something to do. Hot milk is not only one of the best of foods, but it is a tonic in its effects.

It is well to tell the patient the need of time and care, and the importance of treatment. Tell him it will not perform miracles. No one should be permitted to take treatment who does not honestly wish to be relieved of the drink thralldom. The taking of medicine will not render it impossible for a person ever to take liquor; nor will it restrain him from associating with those who habitually use liquor. It will not change the natural disposition of any individual, and it will be useless to expect such a change. Should a man be demented by much drinking, there will be nothing certain about the results of treatment. The chances are against any help for him.

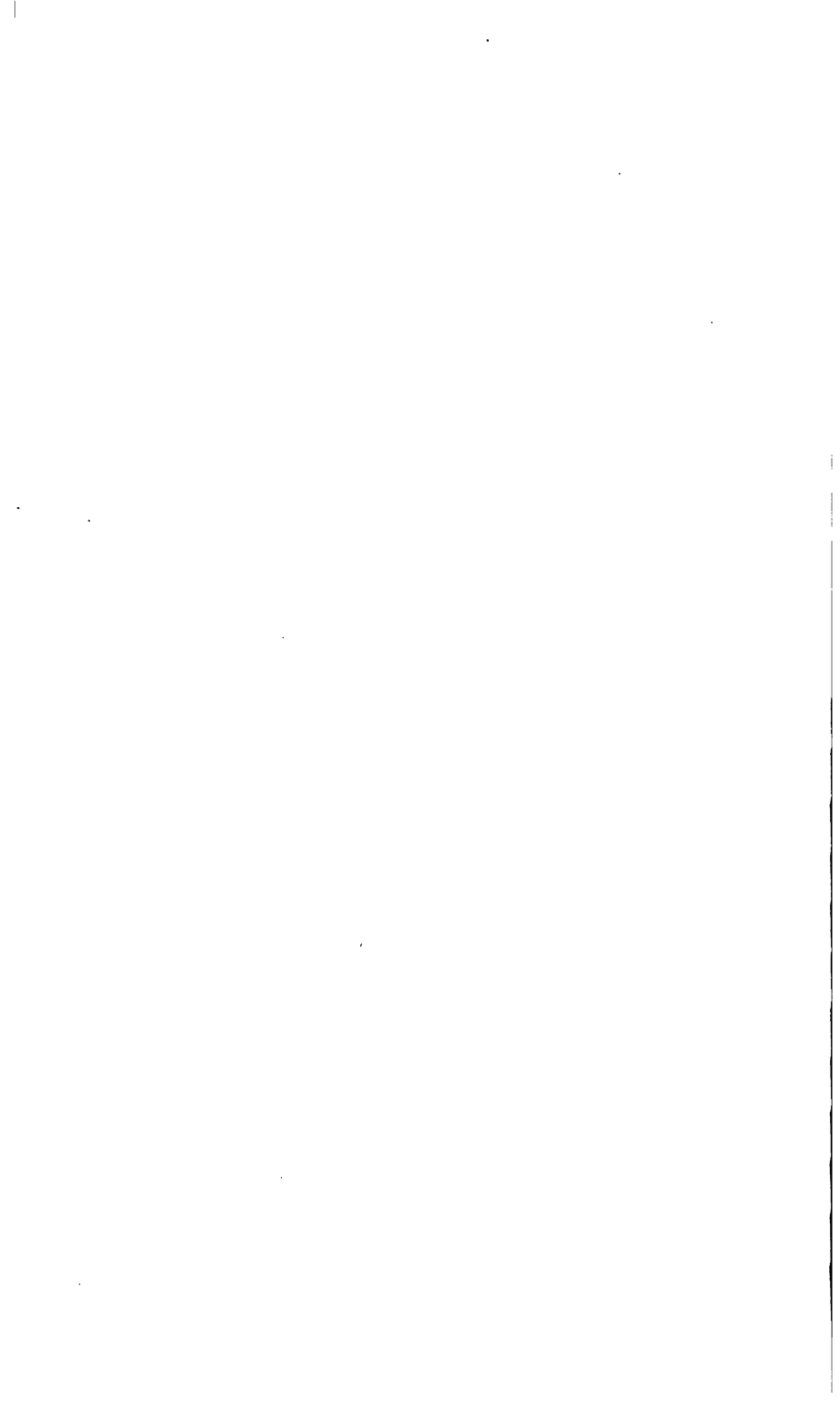
Prolonged treatment will, however, generally do these things:

It will remove the desire for liquor, rendering it unnecessary for the patient to drink again. It will also improve the patient's general physical condition, and enable him to entertain for himself some degree of self-respect.

It will bring out the better qualities of the patient that have been lying dormant under the influence of this drink habit. This fact must be seen to be understood. Should the patient attempt to recultivate the habit of drinking, there is no earthly reason why he should not do it. Liquor will have the same effect upon him that it has always had. Recollect that treatment will enable a man to remain sober if he so desires, and resolutely cultivates his regained self-control.



HOSPITAL TALCOTT HALL.



SEPARATE HOSPITAL TREATMENT FOR THE EPILEPTIC INSANE.

By DANIEL H. ARTHUR, M. D.

The recent articles published in prominent journals of the State in regard to the restrictions as to the kind of cases to be admitted to the Craig Colony for Epileptics are misleading as regards epileptics confined in the State hospitals for the insane. The statement is made repeatedly that the first recruitment made to this new State institution will be from the almshouses and State hospitals, where there are at present about one thousand.

The last report of the State Commission in Lunacy for the fiscal year ending September 30, 1894, gives the number of epileptics confined in the almshouses as 372, which would leave about 628 confined in the State hospitals. Now when you consider the fact that the law has regulated the admissions to the Craig Colony, excluding all insane epileptics, or even epileptics subject to insane outbreaks, the inference is that our State hospitals have many patients committed as insane who are really sane, and eligible under the law to a home at Craig Colony. However, we are confident that there are no patients afflicted with epilepsy confined in this hospital possessing the requirements necessary for a transfer to Craig Colony—that is, free from insanity or insane outbreaks. Nor do I believe there are any sane epileptics confined in any of the other seven State hospitals.

That there are between six and seven hundred insane epileptics confined in the State hospitals must be true, and, judging those confined in other institutions by those here, they must be, for the most part, of a troublesome and chronic variety, and it is the



judgment of experience that this class of patients are not a curative auxilliary associated with acute insanities, any more than is the sane epileptic a benefit to the community at large.

The tendency of insanity with epilepsy is permanency and dementia. There have been cases of epileptic insanity treated at this hospital which have been, apparently, permanently cured, the patient having maintained a sane condition for three and four years. There have been many cases greatly benefited, and even for a short period an apparent cure, but the insane condition has soon recurred. The tendency, however, in the very large majority of cases has been eventually towards a terminal dementia.

The wards of our State hospitals should be relieved of this class of insanity, and exclusive treatment of the insane epileptic be conducted where it would be for the best interest of the patient, and in no way conduce to retard progress in the recovery of regular insanity.

How very often to every asylum physician is the request made by patients to be allowed to live on some ward where there are no "fit cases," accompanied with the statement that the sight of a man in convulsions fills him with dire apprehension as to his own future prospects. The alarming and startling cry of many epileptics preceding a convulsion, and the sight of a writhing, convulsing body, blue, turgid face, distorted vessels and frothing lips, daily, is not a picture calculated to allay the fears and cheer the hopes of a restive and nervous depressed one, or to soothe the nerves and dispel the imagination of excitement.

It is not the idea of quiet, rest, seclusion and experienced treatment that persuaded his friends to seek the State aid for his unfortunate condition. The presence of the epileptic insane associating on the wards of our State hospitals with acute cases of insanity is certainly a menace to their favorable termination.

It is not only the sight of patients in convulsions which has a deteriorating effect upon the sensitive insane, but, apart from this, the daily conduct of the average insane epileptic on the ward is in itself a reproach to the system. There is no class of patients so restive under restraint, none more fault-finding, suspicious and

irritable; none more treacherous and quicker to take offense at fancied wrongs, often through illusions and hallucinations, with resulting injuries inflicted on harmless and defenceless patients. There is so often a fancy to tease and annoy, and to be troublesome. The moral qualities are perverted, and the sense of propriety, decency and duty obscured or lost.

These are symptoms constantly prevalent on the wards of State hospitals where the epileptic insane are confined. Many of these patients have quiescent periods when they are susceptible to reason. Still the excited period is always present in some where there are many confined. Could the periods of attack of these symptoms be brought about in all patients so afflicted at one time, there would certainly be a considerable period of repose for patients annoyed, and nurses. There has as yet no known method been discovered for bringing about such a result, and consequently no relief but in isolation. Different patients have different periods of excitement; the length of time in some is short while in others long. In some cases it precedes a convulsion, while in others it follows closely on a restoration to consciousness. Then again we often have an epileptic psychical equivalent which replaces the convulsive attacks when the symptoms are similar to the irritable and unreasonable condition which precedes and follows the convulsion.

It is a noticeable fact, in the majority of cases, that those patients having the least number of convulsive attacks during the month have the longest periods of excitement. We have here one patient who will not average over two convulsions a month, yet there are very few days of the month when he is not in an irritable, suspicious condition, as regards nurses and patients about him. During this long period he is violent and homicidal if interfered with in any way. This patient is constantly in trouble, and at times severely injured as a result of attacks made by him upon the subject of his suspicions. He has also many times injured others.

Another patient whose attacks will average as many as twenty a week, will manifest only a slight resistance to the nurse in



attempting to do something for him, or an inclination to profanity lasting an hour or so. Still another, whose attacks recur twice a week, may with each attack be in a condition of acute excitement for two days.

This class of patients we have discussed may probably be what would be classified as those having "insane outbreaks" in contradistinction to a continuous condition with these symptoms.

Epileptic insanity may be classified as other insanity. That is, we have with epilepsy the different forms of mania, melancholia, dementia, and all gross conditions, such as imbecility and idiocy, the tendency being in all acute cases towards complete dementia.

We have been able in many cases to benefit, to modify the condition from a constant state of excitement to insane outbreaks before, after, or in place of the convulsion, and decrease the number of convulsions. It must not, however, be inferred that between these periods of excitement or insane outbreaks of epilepsy that the patient is always a person of propriety and quietude. Even then, in most cases, he is very irascible, very impressionable, inclined to false interpretations, and a liability to exaggerate the importance of petty affairs; the outbreak, in the large majority of cases, being simply an exacerbation of the general state.

One old nurse among the epileptic insane, in describing the difference in the degree of excitement, gave it as his experience that between the outbreaks the majority of epileptics became very easily offended, and quarreled with weak and helpless patients, while at other times it seemed as if the convulsions gave him courage, and he would become more indiscriminate as to whom he antagonized. The convulsion undoubtedly conduces to a condition when the patient acts on impulse and blindly, while at other times, reason not being completely blind, results are taken somewhat into consideration. Thus he is in a way able to eliminate, in his acts, any risk to himself. He is, however, a constant disturbing factor,

and is irreconcilable and inharmonious to the treatment of the insane in general on the wards.

There are a number of insane epileptics found in every hospital who cannot be exactly classed as a disturbing element due to excitement. They are quiet, and for the most part orderly. They have no premonitory symptoms preceding a convulsion, no warning of any moment, and no resulting disturbance of a violent nature. Simply a drowsy, stuporous condition which soon passes away, and the patient appears as usual, except the mind is weaker. This class of epileptic insanity quickly lose all mental activity, and progress rapidly towards complete dementia. They soon lose control over all functions ; become filthy in all their habits, neglectful of their appearance, and are soon a constant and complete care to nurses, and a source of annoyance to sensitive, acute patients.

It is not the intention to describe at any length the symptoms of epileptic insanity which come under the constant daily observation of the asylum physician. It is a subject on which an extended volume could be written. It has been the intent to give a brief recital of prominent symptoms, showing the tendency there is, on account of the non-adaptability to ward discipline and regulation of this class of insane patients, to retard the curative process in hopeful cases. It is the endeavor here, as undoubtedly it is in all State hospitals, to look forward to the amelioration and cure of all cases intrusted to our care, and to strive earnestly to bring about such results. Still, the fact remains that the State has not been pre-eminently successful in restoring to normal mental health those afflicted with epilepsy and insanity. In nearly all cases where there was an apparent cure, the insanity has shortly recurred. It is a fact, however, that is susceptible of proof daily, on the wards of every State hospital, that this class of patients is an impediment to the quiet and order that is necessary should be preserved, and in consequence a serious hindrance to the care and treatment of others. It has been the policy of the highest lunacy authority of the State to provide liberally, and to interest themselves in every curative measure, and the State wards have certainly benefited accordingly.

A wise and beneficent order was that which removed to the Rome Custodial Asylum all idiots confined in the State hospitals. This was a relief to the hospitals, and a benefit to that class of dependents. They are now placed where special study is given to their needs, and the best means adopted by those of experience for their care and teaching. These patients, however, were not an especial bad feature on the hospital wards when compared with the epileptic insane. It requires care and watchfulness to preserve in them a sanitary cleanliness. Still, they are never the disrupters of peace and harmony. They are more to be compared to that class of epileptic insanity which has sunk into dementia, with its consequent helplessness.

The next measure to be advocated by the lunacy authorities should be the isolation of epileptic cases from the wards of the State hospitals, where they can be especially treated, where the study of cases can be more individualized, and where they can be cared for with better safety and prospects for the epileptic, and where they will not be a menace to the prospective cure of other insanity.

Our accident books were formerly filled with accounts of the misfortunes to the epileptic insane—that class which receives but little warning preceding a convulsion seldom fail to injure themselves, and sometimes very seriously. A sudden heavy fall, striking the head, is often followed by an interruption of the function of the brain, from fracture or concussion, and which is the cause of many deaths among epileptics, both sane and insane. The accident books will show the records of many bruises and cuts inflicted by epileptic patients for fancied wrongs, and many received by them in return. In nearly all cases you will find the epileptic the aggressor. There is no doubt that these accidents would be reduced to a minimum by the isolation of this disturbing class of patients. This has been fully demonstrated as a fact by the establishment of a separate epileptic ward or hospital at this institution.

It is a peculiar fact, and whether it is due to a fellow sympathy or to some other psychical mystery, the epileptic insane are not

as quarrelsome among themselves, and live together in far more peace and harmony.

Another point of interest is the pressure brought on the disposition of nurses on mixed wards. A nurse harassed and tormented daily, from early morning until bed-time, by irritable, fault-finding and unreasoning epileptics, is not liable to have at all times an invariable disposition. It is expecting almost too much of human nature to expect to find always a serene temper. Many times during the day, it is probable, that he is not in a condition to minister to the sick acute patients who need encouragement, and a hopeful and cheerful disposition to administer it. The nurse for this class of patients should not be required to care for the epileptic insane, if the best results are expected. This fact remains, that under the present system, viz., the same nurses caring for both the epileptic insane and other cases of acute insanity on the same ward, the treatment has not been pre-eminently successful, or even fairly so for the epileptic insane, and surely a hinderance in the treatment of the acute insane.

We often read clinical records of the cure of epilepsy with insanity of long standing, oftener when the attack is recent; yet it is seldom after perusing statistics of annual hospital reports, you ever notice any recoveries of the epileptic insane chronicled. They tell of so many admitted, so many treated, sometimes a few discharged improved, and often many dead. It is very probable that many of the cases of recovery, as found in clinical reports, are not in the majority of cases reliable on account of lack of opportunity of keeping track of patients for any length of time.

As to the State hospitals, however, an occasional cure cannot be considered successful treatment. That a few do recover is true; that a larger percentage should recover is also true. The percentage of recoveries in comparison with those of other forms of insanity is ridiculously small. It is the belief that the same effort is not made for the one as the other. It may be said somewhat in extenuation of the small percentage of recoveries in epileptic insanity, that in the large majority of cases it is probable

that some organic brain change has taken place before the patient is sent to the hospital, which of course lessens the chance of a good recovery record. Epilepsy in itself is an unfortunate condition, but when combined with insanity is the most difficult of diseases to treat. The epileptic is shunned by other patients in many respects as if he was a criminal. His disease produces in him a condition of irritability and suspiciousness of people, with a resulting quarrelsomeness which makes his presence an annoyance to other patients, and a source of worry and apprehension to nurses. He is not to blame. His symptoms are the result of disease, and on account of its peculiar and disagreeable nature, every effort should be made to relieve. There is no question as to the advisability of treating them separately from other insane. Separate hospitals for the care and treatment of the epileptic insane have been advocated and agitated for years, and when two years ago a bill was introduced in the New York Legislature, providing for the appropriation of money to purchase land and erect buildings for the special care and treatment of epileptics, it was generally understood by all hospital managements that it referred to the insane epileptic, and that the State hospitals would soon be relieved of this class of patients, in the best interest of all concerned.

It was surely a charitable move for the State to assume care of all dependent epileptics (sane); still if this class are a responsible element in society, simply unable to earn a livelihood on account of their epileptic attacks, it does seem that there are other classes affected with chronic disease, if the insane epileptic could not be considered, that should have had the preference for State care.

What a wide and beneficent charity it would be for the State to establish hospitals for the care and treatment of tuberculosis in all its different forms; or cancer. These diseases have been demonstrated beyond a doubt to be directly contagious, and the healthy are being constantly infected by their deadly germs. They are dangerous to society, and in the interests of the preservation of health, and the prevention of disease, would seem to

have the first call for State aid. There is no contagion in epilepsy; there is no menace to public health; there is only, in the large majority of cases, the tendency to insanity.

The most enthusiastic students of epilepsy report but a small percentage of recoveries. Consequently, with the strong tendency toward insanity, there will be continually transfers from the Craig Colony to the State hospitals for the insane. Thus the Craig Colony will not afford great relief for the State hospitals, on the principle that those outside will be cared for at the Colony, as the hospitals will eventually receive them.

As soon as a patient in the new Colony commences to give trouble, and such a condition will soon exist, he will be adjudged insane, and sent to an asylum. However, our theme here is not for the purpose of disparaging in any way State care for the epileptic sane, that has already been decided on by the Legislature, and an appropriation of money made for same. This will no doubt work a great benefit for this class of afflicted and despondent sick. The opinion is current, however, that the insane epileptic should also be provided for; that separate and specific treatment should be accorded this class, as irresponsible persons, with more reason than the epileptic sane. This is not only in the interest of the insane epileptic, but the regular insane with whom he is now housed.

It has been the endeavor in the preceding pages, by a description of the general symptoms of epileptic insanity, as manifested on the wards of our State hospitals, to show why the acute insane could be cared for with better results if not mixed with this detrimental element. Also, that the insane epileptic could be more effectually cared for by those devoting all their time to that class. The intent is not of the nature of any reflection upon the epileptic insane as in any degree responsible, but as a condition that exists, and that in the best interests of the suffering sick separate treatment should be provided, either to the extent of separate institutions, or at least separate hospital buildings.

During the later part of the fiscal year ending September 30, 1894, at the instigation of the medical superintendent, there was

inaugurated, at this institution, as an experiment, a separate hospital for the care and treatment of the epileptic insane. Owing to the fact that we had but little room to spare for any purpose, we were unable to care for all this class of patients in the institution, and were obliged to embrace only males, and but a part of those. The provision was primarily for about twenty-five patients; these were carefully selected as being the most helpless, the most troublesome on the ward, and the most dangerous to themselves. From time to time it has been necessary to add to this number until at present our epileptic hospital has thirty-four patients, presided over by three trained nurses during the day and two at night. This hospital is not as yet a model of what we could wish for, and it is not the intention here to describe such an one. We made use of what we had, improved as we could, and hope for new and better quarters in the near future. The site selected embraces the portion of a ward. It consists of two large rooms, connecting with double doors. There is in connection a bath and watercloset. There is light and air on three sides of the hospital, so that good ventilation is assured. The hospital also has its own entrance, both by fire escape, and a regular fire-proof stairway.

With a view to lessening the number of accidents from falls, etc., all sharp points and edges of the beds, furniture and wood-work of the room have been rounded off or removed. All the beds of patients who are in the least liable to fall out during a fit, were provided with side boards. These boards are padded all around with cotton, hair, or some soft material, and then covered with white oil cloth. The iron railing at the head of the bed is wrapped with soft cloths. All the radiators have been protected by thick wire netting, curving around the top of the radiator, and the top of the netting is covered with a soft blanket. Everything small and hard that could be used as a weapon with destructive effect has been removed. On account of lack of room, we have no dining-room, meals being served on trays. Those strong and willing assist in this work, and in fact many have become assistants in all work of a light kind about the hospital. The whole is a regular hospital department, with sitting-room and dining-room and dormitory combined.

There are some of these patients who, on account of their helpless condition, are confined to bed constantly. There are other patients who, on account of periods of excessive violence, may be confined to bed two weeks out of a month ; others for only a week ; some for only a day at a time ; while still others are confined to bed only at the time of convulsion, and the following hour or two. There are, however, of the thirty-four patients now in the hospital about an average of fifty per cent confined to bed at all times. Sometimes this number is greatly increased, and often much diminished. Those patients who are well, and no symptoms of approaching convulsions, are taken walking about the grounds mornings and afternoons. During the summer months they sit about the grounds, with nurses, most of the day, always avoiding the heat of the sun and fatiguing exercise.

Tables and chairs are placed about the hospital, so that those unable to go out, or in inclement weather, all may sit around and read, play games and converse.

At all times any angry discussion, excited conversation or quarreling is at once checked by the nurses, as it would soon lead to a fight. It is interesting to find how little dissension is met with in this isolated hospital. When we consider the quarrelsome disposition found on the wards formerly at all times, the change is noticeable. As a rule, affection, or even good friendship does not exist among the epileptic insane. Even those greatly improved form no great friendly attachments. The sight of each other in the throes of a convulsion commands but little interest, and when a constant daily associate is even in imminent danger of death there is but little concern. The convulsion attracts no attention from the others of any moment. Thus no ill effects are apparent to any on account of the association. The constant association and attention of the nurses to this class of patients soon give him a minute knowledge of each individual trait in his disposition, and thus he is able to care for them for their best possible good. He soon knows the first symptom of a convulsion, and accordingly provides quickly against any chance of accident. Sometimes such symptoms precede the attack a very

short time, but is long enough to enable the nurse to arrive on the spot, and save the patient from an injury by falling.

There is one patient in the hospital who falls with the slightest premonitory symptoms. When on the ward he never failed to cut his head severely, and at one time dangerously. He would surely have eventually met with serious results. In the hospital he is constantly under watchful eyes, and during the year has met with but one slight accident. During the year past there have been less than a dozen accidents, and not any of the least serious nature. When you consider the class cared for, their liability to fall at any time in any place, and the disposition to quarrel and strike with homicidal intent, it shows watchfulness, care and a good system.

It was thought that patients would soon become dissatisfied with this system of isolation, and fret to renew associations on the wards. Such, however, has not proven to be the case. He is more contented, makes less complaint, and is less troublesome in every respect. At the commencement of the fiscal year, there were sixty-three epileptic patients confined in the institution, and under treatment. The death rate of this whole number treated was 6.35 per cent. Twenty-eight of these patients were cared for on the wards, on account of lack of room in the hospital. The death rate among this twenty-eight was 10.70 per cent, while that of those under treatment in the epileptic hospital was only 2.85 per cent.

While we are unable to report any absolute recoveries, still about 25 per cent have shown improvement, and 5 per cent of these are almost free from any mental symptoms, except for a short time following convulsions.

Of the other epileptic patients not under isolated hospital treatment, we have to report but little change in their condition.

These improvements refer not only to a better mental state, but to a decrease in the number of convulsions. The mental improvement is manifested in shorter periods of excitement, less irritable and suspicious, and consequently a better disposition generally. The method gives the physician and nurse an oppor-

tunity to study more carefully the minute individual symptoms. The requisites for each patient are thus better understood.

Discipline is maintained by a mild, gentle, but firm persuasion. No harsh measures are ever employed. Every effort is made to control the impulses for bad, and when unable to do so to prevent accidents.

A thorough system of hygiene of the body is kept up by weekly, semi-weekly and daily baths, and a healthful ventilation. A sanitary cleanliness is maintained at all times in all places by a liberal use of water and soap, and disinfectants when necessary. There has not been noticeable at any time the so-called chronic hospital odor prevalent in some places. When restraint is necessary, as in cases of excessive violence and destructiveness, it is used in the form of restraint sheets, body, bands, and mittens. These articles of treatment are only employed when absolutely necessary; never as a method of punishment or intimidation, and only for the best interest of the patient.

The decreased use of restraint during the past six months, due to lack of necessity, is in itself a testimonial of the improved condition of patients. At the first approach of convulsion in any patient, the nurse nearest ceases all other employment and gives the patient his undivided attention. He first loosens the clothing about chest and neck, and elevates the head slightly. The limbs and body are gently restrained, thus protecting them from any injury. About the beds of those patients who bite the tongue during a convulsion, is kept a small soft piece of wood covered with lint, which is quickly thrust between the teeth, and which prevents a sore tongue, and unsightly blood flowing from the mouth.

After recovery from the convulsion the patient is given an alcohol bath in bed, made comfortable, and generally falls into a deep, stuporous sleep for several hours. Where the patient has a series of convulsions, the physician in charge is always called, and active medical treatment given.

When the disposition is to excitement following the attack, he is carefully watched, and prescribed for according to symptoms presented.

Every patient is placed upon a regular remedy on admission, the remedy being the one which the totality of symptoms seems to call for. When conditions change, the indicated remedy is substituted.

The leading remedies prescribed during the year as regular medicine have been belladonna, absinthum, hyoscyamus, plumbum, arnica, glonoine, nux vomica, solanum, cuprum, oenanthe crocata. Our best success has been attended with oenanthe crocata. Solanum is a fascinating remedy in the treatment of epileptic insanity. It, however, ranks with the bromides, being but a paliative, but more dangerous. It decreases the number of convulsions, and the mental condition improves rapidly. However, the convulsive attacks, when they do appear, are of such a violent and explosive a nature, with consequent rapid exhaustion, that the lives of patients were jeopardized. These very severe attacks were induced in patients whose attacks previously were light. This remedy is said to be more efficacious and less dangerous in epilepsy uncombined with insanity.

We have not operated on any cases of traumatic origin, as no recent cases have been admitted. Only a small per cent of the epileptic insane here at present have any history of traumatism, and these are of old origin. The period of indiscriminate operations on the craniums of epileptics has passed. It is deemed good treatment to trephine all fractures early when there is any indication of injury to the brain, but in old cases the results are not inductive to any further experiments.

The isolation of the epileptic insane for treatment is no longer an experiment here. The benefits and improvements to the epileptic insane, and all other forms of insanity, are too appreciable to ever return to the old system. The cases under treatment, in all but two exceptions, have been of over five years duration. There is no doubt that treatment would be more successful on recent cases. With increased facilities, and more room, we have faith that the best percentage of recoveries can be greatly increased.



DINING ROOM, ANNEX No. 1.



DIETETICS FOR THE INSANE.

By MAURICE C. ASHLEY, M. D.

The question of dietetics for the insane has been, and will continue to be, one of much importance to those who have the care of this class of patients.

In considering this question, there are a few essential points to remember, which may be grouped in a few words.

The nature and the efficacy, the quality and the quantity of the diet, and the cost and manner of preparing and serving it, are all subjects for the most careful consideration.

That the question of diet is a very important one is self-evident when we remember that for every muscular movement, for every thought and for each degree of animal heat, there is an expenditure of a certain amount of vital force, which is produced by the combustion or oxidation of a material commonly called food.

In order to preserve health and keep this human machine in good working order, it is necessary to keep it supplied with a sufficient amount of food to furnish every organ and tissue of the body with that which is necessary to keep all parts in a healthy condition, in order that they may be able to perform their functions, and work in harmony throughout the entire system.

We must furnish not only enough for present needs, but in sufficient quantities to allow the system to store away some as a surplus from which drafts may be made as subsequent necessities may demand.

Just as soon as Nature begins on her accumulated stores, she warns us of the fact in a most emphatic way by hunger, thirst, intestinal uneasiness, general weakness and emaciation, a diminu-

tion in the quantity of carbonic acid, etc. A fetid odor is exhaled from the body, and if nourishment is not promptly supplied vertigo, stupor, delirium, and convulsions occur; the temperature gradually falls, and death from exhaustion takes place.

There is also a refuse material or waste, the product of physiological combustion, which must be quickly eliminated from the system by the bowels, kidneys, skin and lungs.

The removal of these ashes or other wastes from the catch-pits of the human temple is quite as essential as it is to furnish food to the system; and if these excretions are not promptly removed, the blood becomes poisoned, the appetite is impaired, the mind grows sluggish, the head aches, and a general condition of malaise is the result.

Knowing then, and understanding these general and important facts, we are prepared to learn what articles are best suited for us, generally and individually.

We must learn what foods are best suited to keep the system in a healthy condition, and what is required to bring it back to its normal state after it has been deranged.

It is a well known fact that those who suffer from mental disease also suffer with marked disturbance of the digestive organs; that the blood is poisoned, as are all the fluids of the body.

A bite from an insane person is much more dangerous than from a sane person. This condition is not due alone to the fact that the insane neglect to attend to the calls of nature, or keep their bowels free, bladder empty, teeth brushed, etc. The writer has seen several cases of blood poisoning from bites by insane men who kept their teeth well brushed. Wounds heal slower in the insane, and they rally from other forms of sickness much slower than do the sane. For these reasons alone it is necessary to give such articles of food as will furnish the system with that which it needs to quickly restore it to the normal condition, if possible.

No mental improvement can begin and continue until the digestive system is in good working order, and the stomach is kept supplied with just that kind of nourishment which the system

demands, by reason of the physical and mental condition of the individual.

In this paper I shall consider, principally, those articles of food which have been proved, by practical experiment, to be most beneficial to the insane. Experiments in dietary matters have been carried on at the Middletown State Homeopathic Hospital for a period of over eighteen years, under the direction of Dr. Selden H. Talcott, who has gradually established a system of care which is known as the "Hospital Treatment for the Insane."

The beginning was made by placing a few violent and weak patients in bed, and giving them a course of treatment consisting of enforced rest, and hot stimulating liquid diet. After a short trial with these few cases, the method was found to be so eminently satisfactory, as a curative measure, as well as an economical one, that it was continued and has been continuously used and extended, until we have had special infirmary wards built for this form of treatment.

At the present time we have about forty per cent. of our patients in bed in these infirmary wards. These include all the acute, disturbed, helpless, and filthy cases.

One can readily understand that the diet for nearly five hundred persons confined to their beds, is of much importance, and that it is worthy of and receives a great deal of consideration.

In the study of foods, we learn that they are derived from the inorganic, vegetable and animal kingdoms, and are unusually classified as follows:

- (1) "Organic nitrogenized principles, albumen, fibrin, caseine, musciline, etc., from the animal kingdom, and vegetable nitrogenized principles.
- (2) Organic non-nitrogenized principles, sugars, fats and starch.
- (3) "Inorganic principles."

Again, foods are classified into three great divisions which furnish :

- (1) "Vitality, or brains, nerves and bones."
- (2) "Strength, or muscular development."
- (3) "Heat, or fat."

"The phosphates furnish vitality, or brains, nerves and bones. The nitrates furnish strength, or muscular development. The carbonates furnish heat or fat."

ANIMAL FOODS.

Chief among these is milk. Vaughn says : "Milk is a white, yellowish white, or blueish white fluid." (The writer has never seen any of the "blueish white" milk in Orange county.)

Milk may be administered in a great many ways, but for the insane, especially the acute exhausted cases, a cupful of hot (not boiled) milk at frequent intervals, about every three hours when awake, should be given. As milk is digested in about two hours, this leaves an hour's rest for the stomach. In cases of acute mania, and melancholia, also for the aged, and those who have been using too much alcohol, and opium eaters, the hot milk diet has proved of much value ; indeed it is an excellent stimulant, as well as nutrient.

While more milk, perhaps, is given hot than in any other manner, it is also used cold, peptonized, pancreatinized, pasteurized, and in the form of cream. Other valuable products of milk are kumyes, buttermilk, whey, cheese, and butter. It likewise forms happy combinations with other food stuffs, such as "Mellin's" food, malted milk, "Nestle's" food, bovine, beef extracts, malt, flour, rice, hominy, etc.

Its principal use here is as a hot stimulating diet. Milk fulfills all the demands of nature, as a food, more than any other single article of diet known.

Eggs, when perfectly fresh and properly prepared, are very valuable as an article of diet, as, like milk, they contain all the necessary ingredients to sustain life, and develop the human body. Eggs unless perfectly fresh should never be used, nor should even fresh eggs be taken unless the digestive system is in good working order ; as when they are taken, and not promptly digested and absorbed, decomposition ensues, and thus sulphuretted hydrogen and ammonia are generated, and these tend strongly to the production of disease.

Raw eggs are very valuable when a highly concentrated food is desired. They should be cut (the meshes or connecting tissues of the albumen) very fine ; and then they are much more easily digested than if swallowed unwhipped. Eggs may be administered plain, or with milk, iced water, extract of beef, cod liver oil, cocoa, cream, coffee, wine, or with a drachm of whisky poured over each egg.

When administering raw eggs, the mode of preparing them should be frequently changed, else the patient soon becomes tired of the monotony.

MEATS.

Much more meat is consumed than is necessary; indeed much harm is done the system, in a great many instances, by over indulgence in meat.

It has been well said that this is a "meat eating nation." Meat from any animal is composed of muscular fibres, connective tissues, blood vessels, nerves, lymphatic vessels, and more or less adipose tissues.

Among the circumstances which affect the digestibility and nutrient power of meats, are the age at which the animals eaten were killed, and the care bestowed upon them, in feeding, shelter and transportation. Animals which have been underfed, ill-treated and worried, yield very inferior meat. Almost all meat is tough immediately after killing, but it improves on being kept for a day or two in the open air, or three or four weeks in cold storage.

Dr. W. G. Thompson gives, in his "Practical Dietetics," the following table of comparative digestibility, commencing with the most digestible of meats and other common animal foods:

Oysters.

Soft cooked eggs.

Sweetbread.

White fish, boiled or broiled, such as bluefish, shad, snapper.

Weakfish and smelt.

Chicken, broiled or boiled.

Lean roast beef or beefsteak.

Eggs, scrambled or omelette.

Mutton, roasted or broiled.

Squab, partridge.

Bacon, roast fowl, chicken.

Capon, turkey.

Tripe, brains or liver.

Roast lamb.

Chops, mutton or lamb.

Corned beef.

Veal.

Ham.

Duck, snipe, venison, rabbit, and other game.

Salmon, mackerel, herring.

Roast goose.

Lobster and crabs.

Pork.

Smoked, dried or pickled fish, and meats in general.

The preparations of beef in the market are very numerous, and most of them are of more or less value. Among those of value may be mentioned scraped meat, beef meal, "Masquera's" beef jelly, "Darby's" fluid meat, beef blood, meat lozenges, beef peptonoids, "Rudisch's" beef peptone, South America beef extract, beef juice, beef tea bouillon, beef broth, "Liebig's" extract of meat, "Johnson's" fluid beef, "Valentine's" meat juice, bovine, and "Wyeth's" beef juice.

While these concentrated foods are very valuable at times, when it is necessary to have a food which is easily administered and readily assimilated, they must not be depended upon to sustain life for a very long period.

Veal, when obtained from animals of the right age, is considered nutritious, but when the animal slaughtered is too young, it is dry and indigestible. Veal broth is nutritious, but if continued for a very long time is liable to cause diarrhoea. It may be given to patients who suffer from constipation with benefit.

Lamb may be useful at times, but it is very difficult to get it just the right age. It contains a large amount of fat, and is not

usually to be recommended to the sick. Venison is tender and easily digested, but is expensive and difficult to procure.

"Pork is sometimes used, but it is very indigestible, and contains a large percentage of fat." Dr. Thompson says: "Bacon, if cut thin and cooked crisp, is easily broken into small particles during digestion; it can often be eaten by dyspeptics, and forms an excellent variety of fatty food for consumptives."

Chicken is among the most digestible of meats for invalids, whether cooked by boiling, roasting, or broiling. The white meat is more readily digested than the dark. Chicken broth is very easily prepared, and usually much relished by the sick, and is very nutritious.

Many other kinds of meat, which are often used and very valuable, might be mentioned, but those named are more generally used at this hospital.

Fish and shell-fish are used at least once a week, at this institution, and are much relished by the patients. No special effort is made, however, to push the fish diet under the popular delusion that, on account of the phosphorous which fish contains, it should be freely eaten to build up nerve matter.

BREAD.

We give our patients three kinds of bread daily (white, graham and rye), and once or twice a week, corn bread for supper or breakfast, for those who prefer it.

Vegetables of all kinds are freely used in season. Potatoes are not considered by some as being of much value as an aliment, in spite of the fact that they contain so large a percentage of starch. However this may be, we use large quantities of them, and they are almost universally relished by the patients. They are served boiled, stewed, mashed with cream or butter, fried and baked. Baked potatoes, we believe, are the best and most wholesome.

Onions, cabbage, turnips, beets, cauliflower, tomatoes, peas and beans are frequently served to patients who are able to be up and dressed, and to exercise; and sometimes they are served to some of the bed patients as relishes.

Pea and bean soup is frequently served to patients in bed, and is usually much enjoyed by them; certainly these soups are among the most nutritious.

Lettuce is served very frequently; indeed, it is usually kept on the table for general use during the season. When taken with oil it is very palatable, and is a valuable hypnotic and laxative. This vegetable is far more valuable than most people are aware of. Its virtues are but half appreciated or understood.

FRUITS.

The value of fruits is well known to almost every one. They are especially needful to those who are confined in the house, and to those who do not take much active exercise. Fruit cools the system, soothes the mucous membranes, and aids in keeping the bowels free; and for these reasons it should be freely used in hospitals for the insane, as a large number of mental invalids suffer from constipation, and dryness of the alimentary canal.

Over-ripe and un-ripe fruit should never be eaten by any one; the sick should have only the best fruit. Apples, pears, peaches, grapes, prunes, and berries are freely used here, and are generally of an excellent quality. Oranges and bananas are sometimes used, but the cost of those suitable for the sick is usually so great that they can not be furnished as frequently as desired.

Many of the insane need a diet not unlike that of the ordinary individual, and for this class — those who are able to be up and taking exercise daily — there is furnished a diet as follows:

Dietary Table, Showing Regular Bill of Fare for Patients.

MONDAY.

Breakfast.— Bread and butter, oatmeal or hominy, with syrup or milk; beef stew or beefsteak, coffee or cocoa.

Dinner.— Soup (tomato, split peas or vegetable), potatoes, turnips or peas, boiled beef, lettuce, bread and butter, fruit.

Supper.— Bread and butter, rice, with syrup or milk; sauce or berries, tea.

TUESDAY.

Breakfast.— Oatmeal or hominy and milk, hash or ham, boiled potatoes, bread and butter, coffee.

Dinner.— Corned beef, boiled cabbage, or sweet corn, or string beans, potatoes, radishes or raw onions, bread pudding, bread and butter, fruit.

Supper.— Bread and butter, apple sauce or stewed prunes, crackers, tea.

WEDNESDAY.

Breakfast.— Bread and butter, oatmeal or hominy and syrup, sausage, eggs, or fresh fish, potatoes, coffee.

Dinner.— Roast beef, potatoes, onions or beets, milk, bread and butter, lettuce, fruit.

Supper.— Bread and butter, sauce or berries, tea.

THURSDAY.

Breakfast.— Oatmeal and milk, beef stew or beefsteak, potatoes, bread and butter, coffee.

Dinner.— Soup (barley, bean or mock turtle), boiled beef, potatoes, bread and butter.

Supper.— Bread and butter, sauce or berries, cheese, tea.

FRIDAY.

Breakfast.— Clam stew, chowder, or boiled eggs, or fresh fish, sweet potatoes, oatmeal or hominy and syrup, bread and butter, coffee.

Dinner.— Fresh fish, potatoes, onions or canned tomatoes, milk, bread and butter, lettuce, fruit.

Supper.— Stewed oysters, crackers, bread and butter, tea, boiled rice, sauce.

SATURDAY.

Breakfast.— Hash or ham, oatmeal or hominy and milk, potatoes, bread and butter, coffee.

Dinner.— Corned beef and cabbage, potatoes, parsnips or egg plant, or baked beans, bread and butter, radishes or raw onions, fruit.

Supper.— Bread and butter, sauce or berries, corn bread, tea.

SUNDAY.

Breakfast.— Bread and butter, coffee, oatmeal and syrup, sausage and potatoes.

Dinner.— Roast beef, potatoes, celery or lettuce, onions, rice pudding or pie, bread and butter, fruit or berries.

Supper.— Bread and butter, tea, cake, sauce or berries.

Extra Dietary Table for Patients Who Are Confined to Their Beds in the Hospitals.

MONDAY.

Breakfast.— Bread and butter, graham mush cooked with milk, hot or cold milk, coffee, toast.

Dinner.— Soup (tomato, pea or vegetable), with small pieces of meat in the soup ; rice, toast, hot or cold milk, bread and butter, bread pudding.

Supper.— Bread and butter, tea, boiled rice, hot or cold milk, toast.

TUESDAY.

Breakfast.— Bread and butter, coffee, hominy, hot or cold milk, toast.

Dinner.— Barley or rice soup (half stock and half milk), with small cubes of meat added, raw onions, fruit, toast, hot or cold milk.

Supper.— Bread and butter, crackers and cheese, toast, sauce, tea, hot or cold milk.

WEDNESDAY.

Breakfast.— Bread and butter, cracked wheat, coffee, sausage or eggs, hot or cold milk.

Dinner.— Roast beef, boiled rice, bread and gravy, toast, hot or cold milk.

Supper.— Bread and butter, toast, sauce, tea, hot or cold milk.

THURSDAY.

Breakfast.— Bread and butter, samp, toast, hot or cold milk, coffee.

Dinner.— Bean or mock turtle soup, bread and butter, fruit, toast, hot or cold milk.

Supper.— Bread and butter, toast, ginger-bread, sauce, tea, hot or cold milk.

FRIDAY.

Breakfast.— Bread and butter, coffee, rice, toast, hot or cold milk.

Dinner.— Fish chowder, with crackers and vegetables, rice toast, hot or cold milk.

Supper.— Bread and butter, tea, stewed oysters, crackers, toast, hot or cold milk.

SATURDAY.

Breakfast.— Bread and butter, coffee, toast, corn meal mush, hot or cold milk.

Dinner.— Meat balls or roast pork, baked beans, boiled potatoes, fruit, pickles or salad, toast, hot or cold milk.

Supper.— Bread and butter, sauce or berries, tea, rice, corn, bread, toast, hot or cold milk.

SUNDAY.

Breakfast.— Bread and butter, sausage, or eggs to those who prefer them, oatmeal, cocoa, toast, hot or cold milk.

Dinner.— Roast beef, mashed potatoes, celery or lettuce, boiled onions, rice pudding, toast, hot or cold milk.

Supper.— Bread and butter, tea, sauce, cake, toast, hot or cold milk.

Three kinds of bread — wheat, rye and graham — at each meal. Eggs, chicken soup, clam bouillon, beef extracts, beef juices and other concentrated foods, together with preserved fruits and jellies, are given as extra daily diet, when ordered by the physician.

While the above tables show an excellent variety, and furnish

about all that is required, there are frequently times when some special articles are required, and should be procurable.

At this hospital the food is all prepared in one large kitchen by or under the direction of a very skillful chef. The facilities for getting food to the different wards are the best possible for so large an institution.

In the basement of each building is laid an iron track, on which is run a "food car" from the kitchen to the several buildings. This car is closed, and can be propelled rapidly; the food is sent to the wards from the car by means of elevators, going directly to the pantries adjoining the dining-rooms.

The food is all placed in large, closed tin boxes, and the time is very short which lapses from its leaving the kitchen until it is served to the patients. The food, therefore, is served in a hot and palatable condition.

This, of course, is quite easily accomplished with the larger dishes, but with the smaller or special articles, such as a cup of hot milk, beef tea, special kinds of soup, toast, poached eggs, etc., the difficulties are greater. These smaller articles of diet will, in spite of haste and precaution, often become cold and unpalatable by the time they reach the ward and are served.

Under present arrangements, this can not well be avoided. These special articles of diet must be prepared, and sent to the ward at the same time that the other meals are.

One can readily appreciate the necessity of system in conducting the cuisine of such an institution, and can understand how difficult it is to prepare and serve delicacies and special dishes for those who need them. While it is difficult to do so during the day, it is, under the present system, almost impossible during the night.

Any one who has had the care of the sick, or has been ill himself, knows how capricious the appetite becomes, and how essential it is to have every facility for preparing special articles of diet, and serving them in the most tempting manner possible.

Especially is this true with regard to those who suffer from mental disease. These cases are especially hard to please, and many are possessed with delusions of being poisoned by means of

their food, and will not eat unless some particular nurse serves the food. Again, many cases need some hot, stimulating diet at frequent intervals.

For some few years past we have in a measure been able to prepare and serve hot a few simple articles of diet by using small gas stoves on the wards. This has proven of great advantage, but has fallen far short of the actual needs at all times.

The plan which we desire to carry into effect now is to establish a small kitchen in the basement of each building, or at least one in the basement of each of the three large buildings.

The kitchen should be furnished with coal, gas, or preferably, an electric stove, and be supplied with all necessary cooking utensils, and be supplied with groceries, etc., from the general store of the institution.

The matron and hospital chef have kindly consented to give practical lessons in the art of cooking to our nurses, and have already begun the first course with the class. As the nurses become skilled in the culinary art, they can take charge of the small kitchen and teach others. In this way we would soon have a number of nurses who would be able to prepare tempting and delicious surprises for their patients from time to time. There can be no possible doubt of the practicability of this method, or the utility of such an arrangement.

Should this plan be carried out, the nurse on an order from the attending physician could go to this kitchen and prepare any special article of food the case might demand. In many instances it would obviate the necessity of resorting to the nasal tube, or other artificial means of feeding a patient.

ARTIFICIAL FEEDING.

In spite of all we can do there are patients who at times refuse to take food at all, or in sufficient quantity, and who on account of their mental condition would starve. This class of patients have to be fed by some artificial means.

The appliance which has been found best for all cases in this hospital is what is known as "Paine's Nasal Tube and Feeding

Apparatus," by the use of which we are enabled to force any kind of liquid nourishment safely and rapidly into the stomach.

In some instances it is necessary to administer food per rectum. In such cases, the lower bowel is first thoroughly flushed, and then about two ounces of some concentrated, pre-digested liquid food is injected as frequently as necessary.

"The diet kitchen should be expected to furnish only such food as that with the preparation of which the nurse is thoroughly familiar. That it should deal directly, when possible, with the individual, not only that it may stimulate and call forth the best efforts of the nurse, but that on having prepared her food she may learn how to present it to the best advantage.

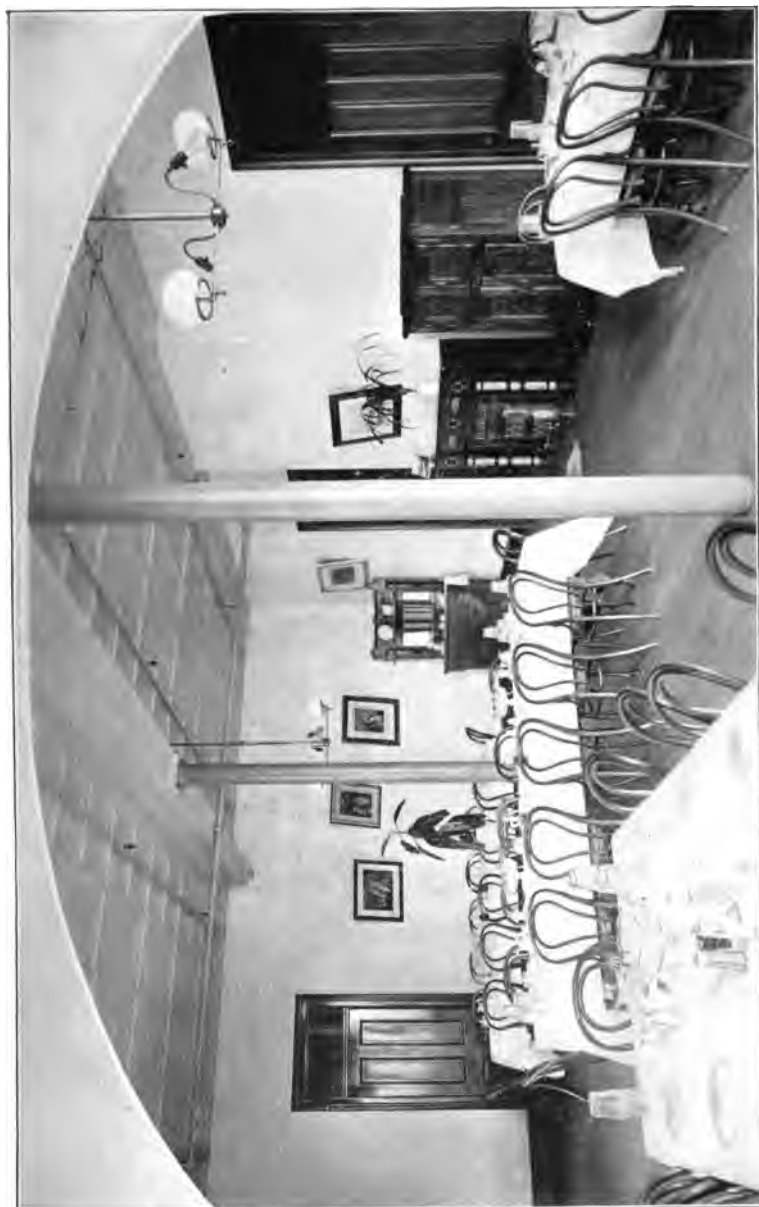
"The value of a diet kitchen to a hospital is estimated entirely by the degree of responsibility assumed in feeding the inmates. It aims to care for such inmates as are upon liquid or special diet; it relieves the general kitchen of its most burdensome task—that of details.

"A diet kitchen in doing this becomes an invaluable help to any hospital. It economizes food, in that it supplies only that which is needed, and in such quantities as may be required.

"The nurse is the one to hail the advent of the diet kitchen. To her it means more than any other part of her training. To know food values, and their respective relation to health and disease, is incalculable. But to be able to prepare food, that by its relish and taste it may not only create its own demands, but become a formidable factor in sustaining life and combating disease, is still a greater advantage.

"The individual who by her act can devise and suggest means by which the appetite may be coquetted, and distaste of food be changed to enjoyment, stands in closer relation to the patient than the physician; for the latter may stimulate energies which are latent, while the former gives to the patient the very energy by which convalescence is inaugurated."

To cook efficiently and to furnish proper food is an art which is acquired by practice. At least two nurses on each ward in our hospitals for the insane should be taught this art.



DINING ROOM, TALCOTT HALL.

What we need, and should have, are better facilities for preparing and serving special articles of diet. A school is needed for the education of nurses in the art of cooking, and small special kitchens are required where food may be prepared at any time, or as needed.

Our food supply, in the main, is abundant and wholesome; the variety is ordinarily sufficient; and as a whole we are fairly well satisfied. But we believe that if we could carry out the suggestions named to the fullest extent, we should be able to cure even more of the mentally afflicted than we can under the present regime. "Eternal improvement is the price of an increased recovery rate." (Dr. Talcott.)

INSANITY IN YOUNG WOMEN.

By CLARA BARRUS, M. D.

During nearly three years' connection with the Middletown State Homeopathic Hospital, 121 insane girls and young women have come to my notice.

The ages of these patients range from 11 to 35. From the ages of 11 to 17 there were six cases; from 17 to 25, 58 cases, 23 of which had the earlier attacks, or the beginning of the present attack between 13 and 23. From 25 to 30 there were 27 cases, 21 of which had their initial attacks between 16 and 25. From 30 to 35 there were 30 cases, 27 of these had the outbreak of insanity between the ages of 17 and 26. It will, therefore, be seen that by far the greater number of cases of insanity occurred between the ages of 17 and 25.

The nationalities represented are: American, 88; Irish, 10; Germans, 7; Hebrews, 4; English, 4; Colored, 3; 2 French; 2 Bohemians; and 1 Swede.

Civil condition.—106 of the patients were unmarried, 15 married. Seven of the unmarried had illegitimate children, and these 7 children, together with nineteen others borne by the married patients, make a total of 26 children borne from these 121 insane young women.

Social status. — Seventy-one middle class, 19 high class, and 31 pauper patients. These figures are, however, misleading, as many of the so-called middle and also high class patients have ultimately become public charges, owing to reverses, duration of insanity, etc. The attempt at classification refers rather to the original status in society of the patient.

Education. — Those having a common school education number 63; an academic, 36; a collegiate, 7; 7 patients read and write only, and 8 are said to have no education at all.

Occupation. — Fifty out of the 121 patients had no occupation, 18 were housewives, 17 domestics, 12 teachers, 8 students, 6 musicians, and the remaining few were divided up between stenographers, clerks, dressmakers, artists, elocutionists and nurse girls.

Forms of insanity. — An attempt to classify cases of insanity occurring during pubescence or adolescence meets with even more difficulty than we experience in the classification of insanity in adults. For, while some patients present well marked periods of excitement with the accompanying maniacal symptoms, and others show the profound depression and the distressing concomitants of melancholia, still, each case is characterized by a peculiar contradictoriness and uncertainty belonging to adolescent insanity. Rapid alterations of mania and melancholia in the same individual, without the distinctly marked cycle of *folie circulaire*, make it difficult to classify the individual case. Delusions of personal importance and of persecution, or extravagant notions of grandeur and power, make us doubtful how to class the cases which, had they the same delusions in adult life, we should class as cases of paranoia, or some even as general paresis. Nevertheless, an attempt at classification of the cases under consideration has been made. There were found to be 33 cases of acute mania, many of which are recurrent, and 3 or 4 are puerperal. Seventeen cases of subacute mania, 9 of chronic mania, 22 of acute melancholia, 6 of chronic melancholia, 5 of circular insanity, 14 of terminal dementia, 3 of primary dementia, 8 of epileptic insanity, and 4 of imbecility with mania. Many of the cases now classed as dementia terminal were admitted to the hospital as cases of mania or melancholia, but have drifted into dementia in later years.

Alleged causes of insanity. — When patients are brought to the hospital, the friends are asked to state, so far as they know, the cause of the outbreak of insanity. They generally give some one

event or experience as though that were the only cause—the fact being, usually, that it was the culmination of a long train of pernicious influence to mental disease. In many cases, three or more causes are given in one individual, namely, heredity, masturbation, and religious excitement.

Fifty-nine of our 121 cases have acknowledged insane heredity; there are 26 cases attributed to overwork and worry; 10 to masturbation; 10 to domestic worries; 11 to childbirth, 7 of whom bore illegitimate children; 9 to disappointment in love; in 9 more the causes were unknown; 8 were attributed to overstudy; 6 to religious excitement; 7 to traumatism; 8 to epilepsy; 7 to physical disease; and 4 to fright from attempted rape. There were also assigned as causes: Intemperance; novel reading, infantile convulsions, chorea, sunstroke, "mind cure," powerful drugs, bicycle riding, the establishment of puberty, suppression of the menses, death of friends, law suits, etc.

Insane inheritance. — It is generally conceded that heredity is the most potent etiological factor in the production of adolescent insanity. There is, however, such a tendency on the part of the relatives to deny the presence of insanity in their families that alienists say we can safely multiply the acknowledged cases by two and thus reach a more nearly correct result, than if we accept the statements of relatives concerning this matter. The more the insane temperament in the relative, the more persistent is he in denying or concealing the existence of mental disease in the family. Patients are sometimes brought to the hospital by relatives who so evidently manifest the neuropathic constitution by their excitement and flightiness of manner, that it is difficult to determine at a glance which is the patient and which is the accompanying friend. In a few instances, we are tempted to suggest to the patient that she take the accompanying relative back home and get her duly examined and committed—the patient herself being allowed to go "scot free."

Of the 121 patients, in 50 the history of insanity in the family is denied, concerning 7 it is unascertained, 5 others come from distinctly neurotic though not insane families, and 59 are known to

be heavily weighted with an insane inheritance from one or more relatives.

Of the acknowledged insane inheritance in the cases under consideration, 16 had insane mothers, 13 had insane fathers, there were 23 cases showing insanity of paternal relatives, 18 maternal, and in many instances the records fail to show from which parent the taint was derived. In 8 cases there are recorded proofs of insanity from both maternal and paternal relatives.

Aside from the direct connection of insanity in father or mother, brother or sister, there are grandparents and great grandparents, cousins, and aunts and uncles galore.

Patients come to us weighted with an inheritance from two, three, and four or more insane relatives. "I'm fairly saturated with insanity" said one unfortunate girl during an attack of acute mania. Discouraging as some cases seem, some of these patients make good recoveries, although, of course, the tendency to recurring attacks is great. Some instances of two or more insane relatives in the same individual have the added complication of the transmission of insanity from both the paternal and maternal branches. One is led to inquire: What chances for recovery has a young girl weighted at the outset with an insane father and two maternal aunts? Or another who has a father, brother and a paternal aunt and uncle insane? Or still another who has an insane mother, a paternal grandfather, and a maternal grandmother? One girl has a father insane, and five relatives had already committed suicide.

Two of these 121 cases were twin sisters who have been patients at the hospital for five years. A brother was also here for a time; the three patients had attacks of acute mania grafted on to imbecility. These afflicted young people were brought here by parents both of whom were imbeciles, and there was insanity in a paternal aunt as well. The twin sisters became terminal demented. Nature thus put a veto on the continuation of a stock which should have been discounted one or two generations ago.

Accompanying diseases.—The insane are subject to the same physical ailments as are the sane, although the manifestations of

disease are altered in many instances. No mention is made here of physical troubles, except those from which the patients were suffering on admission. They are as follows: Epilepsy, 8; pregnancy, or the puerperal state, 5; cystitis, 4; dyspepsia, 5; anaemia, 3; phthisis, 2; tuberculous diathesis, 2; valvular heart disease, 2; acne vulgaris, 2; psoriasis, 1; cerebral meningitis, 1; paralysis of arm, 1; neurasthenia, 3; chronic laryngitis, 1; convalescent from typhoid fever, 1; facial neuralgia, 1; curvature of spine, 1.

Gynaecological troubles.—Disorders of this kind are not conspicuous among these patients. Seventy-six of these 121 patients were not examined owing to their youth, and to the absence, in most cases, of symptoms demanding such investigations. Of the 45 examined, there were found the following conditions: Sixteen cervical erosions, 8 retroversions, 3 anteversions, 1 anteflexion, 2 latero-versions. Two patients had previously had ovariectomy performed, and one had had clitoridectomy. Two of the married ones had sub-involution, and one had ruptured perineum. There was also one case of vaginismus, and one having uterine polypi.

Menstruation.—The relation of menstruation to insanity, or of insanity to menstruation, is hard to determine. In some of these cases the insanity was directly dependent on menstrual suppression; in some, the maniacal attacks appeared only at the time of menstruation, there being a complete lucid interval between. In two of the cases, aged 11 and 14, puberty is not yet established. Several of the cases had a history of the establishment of puberty postponed till the eighteenth or twentieth years. Many of the patients have amenorrhoea for a time, the majority of them show menstrual irregularity during acute attacks, although many preserve as much regularity as though they were sane. Most of them are more or less excited at the periods, although it is not uncommon to witness an abatement of the motor activity and the cerebral restlessness in maniacal cases during the menstrual flow, and a disappearance of the gloom and apathy in the cases of melancholia.

Physical degenerative signs.—Among these insane patients may be noted certain stigmata, which show them to be descend-

ants from degenerate stock. Six of them have pronounced twitching of the facial muscles, tics, etc.; 8 present varying grades of imbecility, with defective or tardy development of physical structure; 4 are deaf, and 2 are deaf mutes. Eleven have the high-arched, V-shaped, hard palates which characterize them as degenerates; 4 have the peculiar, wavering, restless eyes characterized as neurotic eyes, 4 lisp, 3 stammer, 3 are prematurely grey, 6 have marked asymmetry of features, 8 have irregular ears, 2 are left-handed, 1 has defective sexual organs, 1 strabismus, 1 had premature loss of teeth, and 1 had chorea.

A large number of the cases of chronic insanity present unsymmetrical contraction of the facial muscles, giving their countenances a peculiarly distorted appearance.

Perversions.—Among the perversions noted in these cases, the one which occurs the most often is that of masturbation, there being 42 cases, but it must be remembered that while it may be the cause in some instances, it is the concomitant and the result of existing insanity in many more. Twenty-seven of the cases were suicidal, 22 homicidal, and 22 others both suicidal and homicidal. Thirty-seven of the cases were profane and obscene, these deplorable symptoms being observed in girls who have had the most cultured antecedents. Most of the maniacal cases are filthy during a part of their illness, and the demented ones are almost invariably so unless carefully watched. Their filthiness concerning excretions and saliva is something incredible to all except to those who have the care of them.

A large number of them aside from suicidal tendencies attempt to mutilate themselves in various ways; the self-worrying disposition which manifests itself in biting the nails to the quick, is often carried further, and the skin is picked and mutilated till it is rendered unsightly with ineradicable marks. They also pinch and bite themselves, and pull out their hair and their eyebrows.

Many of them have a pronounced aversion to their nearest friends, which manifests itself in suspicion, abuse, gross accusations, and even homicidal attacks.

A few have an insane fear of men. The majority of these

patients are vain and hysterical, untruthful, mischievous, crafty, and given to pilferings and multitudinous kinds of misconduct. In some of these girls only one or more of the above mentioned perversions exist, but in most of them nearly the entire list is observed during the course of the insanity.

Delusions.—“Their name is legion.” The acute mania cases have unsystematized, rapidly changing ones—“I’m a Russian princess; I’m a Jew; I’m your husband; I’m the Valkyrie; no, I’m the Vigilant,” and a dozen other things one girl will say in one minute’s talk.

But in other cases we find more or less fixed delusions. Below are some of the delusions noted in the cases which form the basis of this paper:

Believes she can’t swallow food because her stomach is grown together.

Thinks we feed her poison.

Thinks we give her “love powders” to make her like the doctors.

Thinks we beat her, insult her, and make her swear.

Thinks she is possessed of the devil (and certainly acts so).

Thinks she is Jehovah, the Virgin, the church, the bride of Christ, the Savior, or God’s wife.

Thinks she is married and has had several children.

Thinks she has had a rooster for a child.

Thinks she is pregnant.

Thinks she has had a baby which was conceived by the Holy Ghost.

Thinks she is a crazy alligator.

Thinks she is a snake, and wriggles and hisses like one.

Thinks she is a dog, a cat, a chicken, or a horse.

Thinks she is a little colored girl.

Says she is a boy.

Says she is dead and must be buried.

Says she has committed the unpardonable sin.

Says God is dead.

Says she is Adam and Eve.

Says she is persecuted by her family.

Says her body is immortal.

Says her hands are being bitten by horses.

Says this is a brothel.

Says her ovaries have been removed.

Thinks she is violated in the night.

Thinks she is engaged, and waits daily by the window for her lover.

Keeps handkerchief rolled in palm of hand and says it is God.

Thinks snakes are crawling on her and are in bed with her.

• Says there is a white elephant in her bed.

Says she is an electric bell.

Asks to have her uterus removed, as she is married to the devil, and doesn't wish to have devilish children.

Says she is a black snake with a false face.

Imagines she is covered with dust and dirt and can never get clean; washes hands all day if allowed water in the room.

Premonitory symptoms of adolescent insanity. — Before the friends of these patients recognize them to be of unsound mind, hysterical manifestations, countless in number and variety, characterize most of them. They are for the most part girls who have been given up to willfulness, caprice, passion and self-indulgence, the parents having yielded to their whims till the girls became veritable tyrants. A certain shrewdness characterizes these misguided girls; finding they can get their own way by so doing, they indulge, upon occasion, in fits of hysterics when their friends are inclined to oppose them. There is a changeability about them which makes them very uncertain elements in the family life; they are as unstable as weather vanes. They will not brook any interference and are intolerant of restraint, giving way to tumultuous emotions when attempts are made to control their conduct, their aversion to such control being in direct proportion to the necessity for it. "Was your daughter willful and passionate as a child, or are these exhibitions the result of her disease?" And for some unaccountable reason the mother attempts to conceal or actually delude herself concerning the truth, and tell us that the girl has always been sweet-

tempered and docile. Later we learn from some disinterested relative that the child has often been seen to become furious at any opposition, stamping her feet and even spitting in her mother's face. Thus the daughter who is said to have been a model of propriety is found to have been, like Carlyle, "gey ill to live with."

These girls can not be made to reason. "I can't help it," or "because I want to," are their only attempts to justify their wayward conduct. They are moody, self-absorbed, and consequently depressed. Or, they evince an exaggerated self-assertion and undue elation. Their exaggerated impressionability renders them very sensitive to supposed slights and keeps them "in hot water" most of the time. They are imbued with the idea that they are "not appreciated."

The protean forms of hysteria which develop during the incipency of the disease make us ready to expect the unexpected from them always. They may be morbidly conscientious and aim at extreme circumspection of speech and conduct, or they may become cat-like and crafty, and disposed to take a ghoulish delight in all sorts of mischief and wrong — their conduct being merely an exaggeration of their individual impulses and tendencies. Many of them show a propensity for prevaricating for no other motive than an inherent desire to deceive. They may be "light-fingered," often being detected in petty thefts. They are prone to run away from home, using the fire escape and other extraordinary means of escape, if the ordinary ones fail. Or they may show extravagance, ordering large bills of goods sent C. O. D., and in other ways attempting to carry things with a high hand. Some of them become very slangy and "tomboyish," aping the tone, gait and conduct of a boy. Some of them belong to the order of whistling girls, and shout and whistle in a very boisterous manner.

Further manifestations.— After the actual outbreak of insanity, the condition is only an exaggeration and prolongation of these wayward tendencies. They become imperious, arrogant and dramatic; or taciturn, moody and despondent. The destruc-

tive tendency becomes very strong, they especially delight in breaking glass, smashing things generally, in tearing clothing, and in destroying everything of value. Many of them show wonderful facility in the making of rhymes and puns, and they recite poetry, sing songs, or sing their conversation for hours at a time. It is during the acute attacks that the various perversions appear. The suicidal cases make repeated attempts to carry out their purpose, the homicidal are persistent in their efforts and show a malicious delight whenever they accomplish even a part of their intent.

The depressed and morbidly conscientious patients are prone to self-accusations, sometimes reverting to childhood and girlhood and recalling petty wrong doings, all of which increase their self-denunciatory states. Some even accuse themselves of horrible perversions in childhood, which we can hardly credit.

Some maintain a quasi-cataleptic state and remain that way for weeks and even months, evidently comprehending all that is going on about them—a blush and a quivering of the eyelids betraying their consciousness of what is said to them. Some persist in talking baby talk for days or weeks at a time.

Epileptics are especially homicidal and dangerous. After attacks they are quite prone to talk familiarly with God, addressing Him as though He and they were boon companions. One young girl, on admission, being asked by the nurse if she were not going to say her prayers, quickly replied: "Good night, God," and crept into bed with a consciousness of duty done. This is, however, far preferable to the midnight vigils of those who wrestle with the Lord after the Jacobian fashion.

Durations and recoveries.—The duration of insanity in these cases cannot be accurately determined, many of them being insane for varying lengths of time previous to admission, and no accurate means of determining the time being at our disposal. Of the acute cases that have recovered most recoveries were made in from six to twelve months. Some of the chronic cases, though young on admission, have been here six, eight, ten years and even longer, and for that reason patients now over thirty years of age

have been included in this study. The acute cases which fail to recover gradually slide into chronic mania or chronic melancholia, and from these conditions to the still lower step in the scale of degeneracy — terminal dementia.

Of these 121 young women, 68 are still here. Concerning the recovery of these 68, 23 give us reason to hope; in 25 the prognosis is doubtful, and 20 give little or no promise of recovery. Fifty-three have been discharged. Of these 53, 40 were recovered, 7 died, 5 were transferred unimproved, and 1 was discharged as improved, but not cured.

Treatment.—The treatment adopted in these cases is not easily defined, being based on the needs of the individual cases so far as possible.

The removal from home and the environments which were aggravating the condition, is the first step toward helping the patient to recover her mental health.

Physical disorders are sought after and remedied by hygienic and therapeutic measures.

Rest for the overworked and worried patients—enforced rest in bed—is one of the means employed toward rebuilding the shattered physical structure. Abundance of plain, nourishing food with liberal allowance of raw eggs and hot milk are important allies in our efforts at reconstruction.

When we have attended to the physical ailments of our patient, there still remain the “thick coming fancies which keep her from her rest,” and we have before us the difficult task of ministering to a mind diseased. We are often forced to say with conviction: “Therein the patient must minister to herself.” We can only stand by observantly and wait, with here and there a suggestion or a word of encouragement, while the work of reconstruction is going on. We can do much, however, in the way of directing the work, exercise, amusement and reading of many of the patients. A judicious selection of the fellow patients with whom they associate is also important, as patients are helpful or harmful to each other to a great degree.

The regular life, the salutary discipline of conforming to the

rules of the institution, the example of so many others conforming to the same rules, the encouragement of self-control, the discouragement of self-regard, the observant neglect of those inclined to be hysterical or hypochondrical—these are some of the means employed in the restoration of the mental health of our patients.

Remarks.—These cases which we have under consideration, although presenting various types of mental diseases, come under the heading of pubescent or adolescent insanity. Pubescent insanity is usually held to cover cases occurring between 11 and 18 years of age, adolescent insanity those between 18 and 25.

That the evolution of puberty, with the physical, mental and moral changes which attend it, should tax the stability of an organism tainted with hereditary insanity is not to be wondered at, when, even in more fortunately endowed girls we find at this period manifestations bordering on morbid mental conditions. Let any one reflect on the silly actions, the sentimental and absurd notions, the whims, the impulses, the willfulness and the egotism of the average school girl, with her exaggerated self importance and her diminished common sense, and he will see in these exhibitions only a lesser degree of the phenomena we witness in pubescent insanity.

“She’s a long time climbing Fool’s Hill” is an expression we first heard at an age when it seemed to have in it something offensively personal. The Germans have a forcible expression for the mental aberration of youth at this period—*permanenz der Flegeljahre*—a remaining in the mental state in which all the emotions are as shallow and as fleeting as they are in the years of puberty, simply an increase and a prolongation of the manifestations which the youth of both sexes are expected to relinquish when they shall have climbed to the summit of “Fool’s Hill.”

The appearance of a function which is henceforth to be one of the most important not only to the individual but to the race, is naturally attended with profound changes in the individual, but the years of puberty are, strange to say, more exempt from

insanity than the following ones of adolescence, during which the full reproductive energy is being attained. The mental changes from 14 to 18 are slight compared with those from 18 to 25. Physiologists tell us that during this latter period there are roused to activity whole tracts of brain substance which had heretofore lain dormant. The awakening to activity of these tracts in a neurotic individual, cannot be otherwise than attended with peril to her mental balance. It is during adolescence that the eccentricities and degenerative tendencies of all the ancestors of the victim come to the surface; the effects of the sins and shortcomings, the excesses, perhaps even the repressions, back to the third or fourth generation, crop out then, and often with increased vigor.

That marriage should be postponed till adolescence is passed is especially true of all possessing a neuropathic inheritance; for up to that time, the taint in the constitution may lie dormant. If this period be safely passed, the girl does not run so great risk of developing insanity after marriage.

The cases of insanity that develop during the evolution of adolescence are Nature's danger signals held out to us. Shall these unstable organisms be permitted to reproduce their kind? Will the patient recover her mental health and be fitted later to assume the duties of maternity, or will this brain disease go on to dementia and so put an end to the continuation of the species under such adverse circumstances? Until this question is answered in Nature's own time, marriage should be positively forbidden.

There is an excessive development of the reproductive instinct in most neurotic cases. Physicians recognize this and many of them contend that the enforced repression of so manifest an instinct must be followed by untoward results. They, therefore, advise these patients to marry young, hoping that this outlet for their activities will aid them in preserving their mental balance. This is questionable advice. The body does not attain its full development till adolescence is passed. The first appearance of a function by no means implies that the organism is ready for

its exercise; in fact, function precedes development of organs. In the most pronounced neurotic types, the sexual instinct appearing sometimes much in advance of puberty. Both physiology and psychology teach us, moreover, that the full potentiality of motherhood is not reached till the age of 25. So that, even if there are signs of over-development of the reproductive energy, it would better be directed into other channels rather than to increase mental instability by early marriages, and entail upon offspring still more pronounced neurotic inheritance. Exaggerated tendencies are usually capable of being directed into other courses. Judicious supervision of a neurotic girl's life may do much toward furnishing her with sufficient vent for her superabundant activities, and tide her over this period and its perils, without resort to marriage.

In a few instances the fact that the young girls realized that there was insanity in their families proved sufficient to prevent them from marrying. Every time they became at all interested in young men who were attentive, this dark inheritance would appear to them — a veritable sword of Damocles, menacing them, and prohibiting them from entertaining ideas of love or marriage. Two instances are recalled now of bright attractive girls whose conscientious scruples kept them from becoming wives, though their wills could not prevent them from loving. One girl said, when asked what she thought caused her mental disease, "Love, I suppose. I wouldn't marry, partly from obstinacy, and partly because there was insanity in the family. I had an aunt die insane from disappointment in love." She also added: "But I flirted all I wanted too after that, just to get revenge on fate, you know." She said all this, alternating her rational replies with a double conversation carried on with the voices she constantly heard talking to her.

Among these 121 cases are classed a few girls who became insane at or near the time of giving birth to illegitimate children. Also a few (fifteen) girl-wives. These cases, although of puerperal origin, are not improperly classed with those of adolescent insanity, and are therefore included although they were married.

For they were all of the neurotic type and added the burdens of marriage and motherhood to those of adolescence when nature was already having all she could well do to preserve the mental balance.

The marriage of one impressionable, weakly romantic American girl to a Chinaman, was not long in culminating in an attack of acute melancholia. The marriage had taken place in opposition to the family; a baby came three months after marriage; the taunts and prying observation of a suspicious, uncongenial husband hastened the attack, combined as they were with the indiscretions of her monthly nurse who, during the puerperal state, entertained her in the small hours of the night by telling ghost stories till the terrified patient implored her to stop.

Another young wife was a nervous girl with a history of youthful perversions growing out of a premature and excessive development of the reproductive instinct, married to a man twenty years her senior, vastly her superior in intellect, but one in whom the paternal instincts were so deadened that the coming birth of his child called out the very demon in him. The early history of the girl's life shows she never should have married, but the particular marriage which she made only served to intensify the morbid tendencies which lay dormant from childhood. Attacks of *furor uterinus* and the most deplorable nymphomaniacal manifestations were the outcome of the evil practices to which she was subjected during her married life.

Another young wife confessed to having married her cousin out of spite, after being jilted by her lover. And another weak-minded girl was over-persuaded by her mother to marry a man for whom she cared nothing. He came to her on the evening of her wedding day intoxicated; he beat her and otherwise abused her. On the birth of her baby, the culmination of her griefs and wrongs resulted in a complete perversion of the normal mother's instincts. She used to pinch her baby till it was black and blue; it was some days before it was discovered why the child cried so much. When found out and questioned the young mother gave no excuse, but on recovery said: "There was another girl there

whose baby was fatter than mine, so I pinched him because he wasn't nice and fat like hers. I wouldn't do it now."

This cruelty fades away by the side of one of the other young mothers who salted and peppered her three months' old baby, and was about to roast it when discovered. This last mentioned patient, however, made a good recovery and returned with joy to her home and children.

The alleged causes of insanity have been mentioned. In studying each individual case one is able to see what have been some of the contributing causes. The formative influences of childhood, girlhood, and young womanhood have been investigated, and it has not been difficult to understand why these patients, most of whom had predisposition to insanity, finally lost their mental equilibrium during the critical periods of puberty and adolescence.

At the start, the greater number of the cases are handicapped by an insane inheritance, many of them are daily subjected to psychological influences from these abnormal relatives. Or, what is even more trying, the family, though not insane, may be a neurotic family, subject to eccentricities of thought and conduct, making the home life a real hot-bed for festering still other degenerate growths.

Given a neurotic temperament, it does not require much more than the ordinary misfortunes of life to produce mental aberration. A slight bodily deformity, such as lisping, stammering, or deafness, may, in a weak mind, be such a constant source of annoyance and chagrin, that it may have no small influence in the development of insanity, for infirmity is prone to breed envy, and from envy to suspicion of others is but a step. Most of these patients come to us in suspicious and apprehensive moods — they suffer from an unreasonable and often indefinable fear, although many of them express definite fears of being poisoned, burned to death, "butchered," etc. Others think they themselves have done some dreadful things, and others that they are constantly being accused of murder, larceny, arson, etc.

In talking with these young patients we often learn of influences which have been at work concerning which the relatives had

no suspicion. One girl told us that all her life she believed herself to have been a foundling. She concealed this belief, brooding over it, and found fancied proofs in trifling acts and chance remarks of her parents. This feeling of estrangement from the nearest relatives is common in adolescent insanity — in one girl giving rise to this delusion of having been adopted; in another making her feel that her relatives are unfriendly, indifferent, or even actively bent on persecuting her. The feeling of alienation probably arises because of the new, conflicting, incomprehensible impulses developing in the girl's nature; eccentric actions are the outcome of these contending forces; she says and does things which meet with the disapproval of wiser members of the family. She feels herself out of harmony with her friends, and attempts to solve the problem on the supposition that she was a foundling; or, if not that, at least, she believes that her relatives no longer care for her, and wish her out of the way.

A home in which there is actual want of harmony between its members is always a disturbing element to a sensitive organization. Many a girl has spoken of the awful strain she felt in her home life, because of the bickerings and wranglings between her parents. A fault-finding, nagging mother makes the life of the father wretched; or an irascible, unreasonable father domineering over a patient, over-worked mother, have been daily sources of irritation to sensitive, growing girls that have had no small share in developing insanity.

The case of a young mulatto is one in which the formative influences are easily seen to have been such that a high-strung, tempestuous nature was the outcome. She was the daughter of a negro mother and a white father—a man of birth and breeding who did not of course marry the impulsive colored girl who was the mother of his child, but he put the girl at Hampton where she received educational advantages which stimulated her ambition and yet made her feel all the more keenly the stigma of her birth. After leaving school the girl went back to her mother's home. During her absence at school her mother had married a colored man and had given birth to a colored child. The young girls tells

of her trials in that home, of her rebellious feelings that she had been born of a parentage which gave her such contending emotions and aspirations. She tells of the little baby and how it aroused evil propensities in her, and how she used to wonder at and struggle against them. "I used to hate that black baby and want to kill it, but I tried to be good to it. Then I met Joseph and married him just to get away from home, and it didn't take me long to find out that I hated him too." The whole history of her mental disorder shows a contradictoriness, a mixture of good and evil, unsatisfied instincts clamoring for expression and having no vent except in deplorable perversities of thought, speech, and action; in fact, a nature out of tune with itself, its environments, and the world at large. And yet the alleged cause of insanity in this case is given as "trouble with the neighbors."

The reading of unwholesome and trashy books and papers is responsible for not a little influence in the degeneration going on in these unstable organisms. Also the proverbial "evil associations" which not only corrupt good manners but good morals as well.

Some of these cases betray a pruriency of imagination with attendant delusions which seem absolutely incomprehensible. One young girl in particular, who saw intended "insults" in the most harmless remarks of the physician, until a talk with her evil-minded mother convinced one that the entire home training had been such that she had acquired the most distorted views of subjects concerning which girls should have only a wholesome understanding.

The tendency of the romantic girl to find a hero in every one she meets, should not be lost sight of in her relations with her pastor, her physician, or teacher. These men come into a girl's life very closely. If they are the right-minded, high-souled men they should be, and usually are, they can keep this natural romanticism on a healthful basis and thus be instrumental in directing the girl's career to no small degree; but if they are vain, or unprincipled, or inclined to experiment on her susceptibilities, the amount of harm they can effect is unmeasurable.

Young women patients have confessed to having such a sus-

ceptibility in reference to their physicians that they found themselves hunting out excuses for going to the doctor's office—an hysterical condition which they themselves recognized as something to be shunned. One case of acute mania was not so fortunate as to have the right kind of a physician during the incipency of her disease. She allowed herself to go night after night to be hypnotized by a man whose influence over her was anything but good. She had a short, sharp attack of mania. On her recovery she said she believed the above mentioned experiences had more to do with her insanity than the hard musical work, and the excitement of appearing in public concerts, which were given as causes on her admission to the hospital.

Occupation.—The occupations represented by these patients show that they have little if any significance as regards the causation of insanity. Fifty out of the 121 had no occupation—a fact which is much more significant from an etiological point of view than the kind of occupation. For idleness and aimlessness are potent factors in causing mental unrest which may deepen into actual mental disease.

A boy's training is such that he understands that he must bear his share of work and responsibility in the world, but the majority of girls have nothing set before them after school is over but the task of securing a husband. Failing in this, and in the absence of any other aim in life, they can hardly help considering their lives as failures. It is an established condition of things as cruel as it is erroneous. Girls have the dawning hopes, the vague aspirations, and the thrills of ambition common to the years of pubescence, the same as their brothers, yet they are too often made to feel the utter uselessness of efforts at self-culture, and the futility of engaging in any serious occupation, even in these days when so many opportunities are held out to them. Whenever they do choose an occupation it is often with the idea of its being only temporary, and that they need not put into it much expenditure of thought or force. In some homes, however, the necessity of helping financially proves an untold blessing to the young woman. She is conscious of being of some use in the world,

the effort to become proficient in her work gives a zest to existence which favors physical and mental health. Every physician will recall families in which this necessity for work on the daughter's part does not exist. She is kept at home, often against a strong desire to engage in some useful pursuit, occupied only with petty household duties which are devoid of absorbing interest. This humdrum life, and the artificialities of society, furnish her only occupation and recreation. A repression of healthful hopes, and a restlessness result, which are followed by discontent, and finally by a despondency which, taken with unfavorable surroundings, and perhaps a neurotic inheritance, may easily develop into a typical case of adolescent insanity.

This lack of definite aim in a girl's life at a time when her whole nature is blindly reaching out for something beyond the sordid actualities, is, to my mind, one of the causes which render her an easy prey to insanity, other conditions being favorable.

This is by no means taking the ground that the domestic virtues are to be ignored, or that girls should be brought up to shun marriage. It is claimed that they should be made from girlhood to feel that they are not only potential women, but also human beings, and, as such, have certain duties and responsibilities in the world. They should actively engage in some occupation, pursuit or study, with all the earnestness we look for in their brothers, letting wifehood and motherhood be looked forward to as beautiful possibilities if, after having attained their full physical and mental development, they shall find themselves fitted for, inclined to, or sought after to fill those positions.

Although we believe that the lack of aim and of occupation has contributed to the development of insanity in many of these cases, we have also to state that some of these patients come to us from actual overwork and too close application to business. "Too many irons in the fire" is what a bright girl gave as the reason for her insanity. She added: "I was living a three-fold life those last two years—I was the music student, working conscientiously under the best masters in Paris; I was the teacher of English in Madame V—'s school, and the arbiter of all questions pertaining

to the English language, manners and customs; at the same time I was trying to perfect myself in the French language, and I was the American girl abroad, and, as such, living an exacting social life, being entertained by my countrymen in Paris — and besides all this, I was intensely interested in the Protestant mission work and my Sundays were the hardest, but the most eagerly looked for days in all the week." Added to these demands on time and strength, the last six months before her outbreak of insanity she became engaged to a French army officer. She saw him often in the whirl of life and gayety around her. She tried to find time at odd minutes to work on her *trousseau* — then the crash came. An attack of acute mania put a stop to the mad pace at which she was going, and fortunately postponed a marriage which would undoubtedly have been followed by insanity.

A life of temperance (using the word in its broadest sense) is one of the best prophylactics for these neuropathic patients. Hard work and no play, too serious views of life, neglect to relax and yield to the sportive tendencies of youth are easily found in be quite as productive of evil as no work, and no aim in life. A few of these cases have been girls who, like Hamlet, believed themselves born to reduce the dislocation of a world sadly "out of joint."

Study, work and responsibility are blessings to the young. It is overwork, over study, the never laying aside of responsibility, that do harm.

Religious excitement.—Just at the time in their lives when they are at least capable of understanding the true import of religion, the young of both sexes, but more especially girls, are easily and deleteriously acted upon by some of our religious customs and observances. They are working hard in school with their studies. In New York State the regents examination—that bugbear of the New York school-girl—is ever growling in their midst. Then along comes some well meaning evangelist, with his talent for holding revival meetings, and to the burden of school work and the changes of puberty or adolescence, are added the feverishly absorbing influences of the religious revival. And the more

conscientious, the more highly strung is the girl's nature, the more deleterious are the effects of this movement. Religion to the young is not a principle, not a motive power for lasting good, so often as it is an emotion, swaying profoundly for a time, appealing to their dawning hopes and high ideals, and serving to keep them in an overstrained, highly wrought mood which renders them extremely prone to a mental outbreak. Let one but step into one of these meetings in the height of the revival and witness the fervor with which the young join in the hymns, see their restless eyes, their feverish cheeks, and mark how much the magnetic influence of the evangelist is mixed up with the rest of the program and if he be a dispassionate observer, he can but acknowledge that emotion and not reason is the motive power there. To the ordinary well-balanced youth, a lowering in the standard of scholarship for the term, and a transient unhealthful excitement may be the only harm that results; but the girl of neurotic inheritance does not escape so easily. She goes home after the meeting, the thundering tones of the evangelist still haunt her, she prays for hours, then sits up half the night trying to prepare her lessons for the next day. She may feel her own sins are beyond pardon, or, perhaps she is bearing the burden of those of her nearest friends, whose obduracy make her continue her wrestlings with God for weeks, till finally melancholia supervenes.

A mother of one of these unfortunate girls told me how, during a "season of revival," she found her daughter in a dark, cold clothespress, scantily clothed, praying at midnight for her father and mother, neither of whom felt that they were especial transgressors against the law, human or divine. At another time she was found in a hen house praying for herself and relatives. Now she is on our wards, drifting into dementia, with occasional outbreaks of profanity — so far has the pendulum swung the other way — a girl of 14 who was a year ago considered bright and even precocious in her studies. The mother, realizing the approaching catastrophe, attempted to rouse her daughter in various ways. She gave her a birthday party hoping to stimulate her interest in temporal affairs. The guests were all assembled and having a

good time when the little hostess whispered to her mother :
"Send them all home and let us pray for them."

Another girl who came to us with a multitude of religious delusions is found to have been living with an aunt who has been an active worker in the Faith Cure movement, and a follower of the Salvation Army, and other religious fads. The girl is now suffering from an attack of subacute mania. She calls herself the wife of the Salvation Army captain ; says Jehovah is in her ; that she has come to seek and save those who are lost. She evinces an egotistical bearing and an assumption of importance, and makes repeated declarations of righteousness, life and character that are sadly at variance with some of her daily practices.

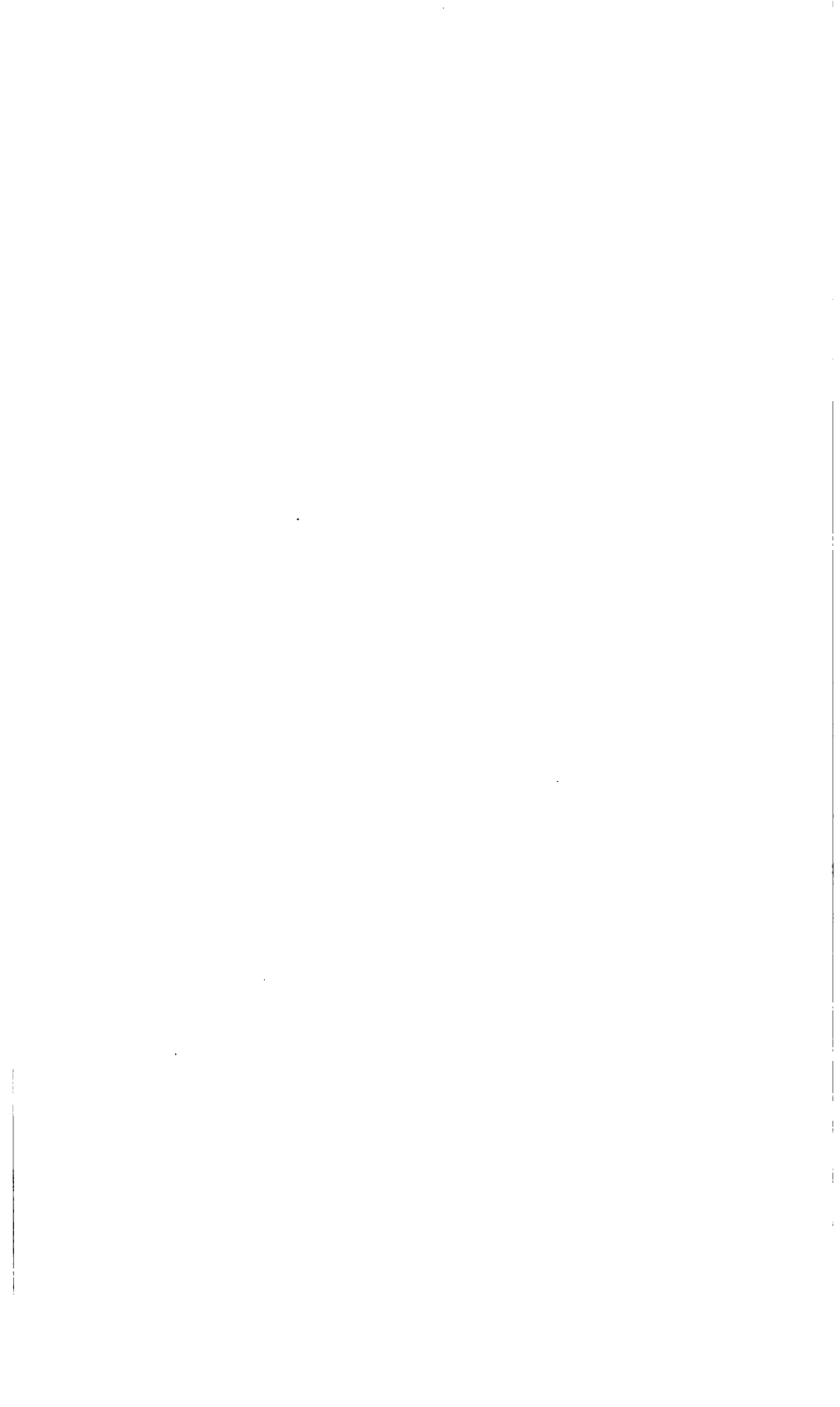
Many well meaning but over zealous persons would consider these remarks as blasphemous, but if they could see as we do how closely connected are these frothy religious professions with the most perverted practices, they would understand our feeling in wishing to keep religion on a rational basis.

Our observations make us urge parents and pastors to exercise a judicious control over these impressionable girls, a control which shall guard against morbid introspection. There should be a temperance in the perusal of religious tracts, and in the reading of the Bible, and a discouragement of the practice of keeping diaries which record their religious states and experiences.

We have enumerated at length what have seemed to be some of the influences and causes which have hindered these young women from preserving their mental equilibrium, with the hope that these hints may prove suggestive to those who have the training of other neurotic girls and young women.



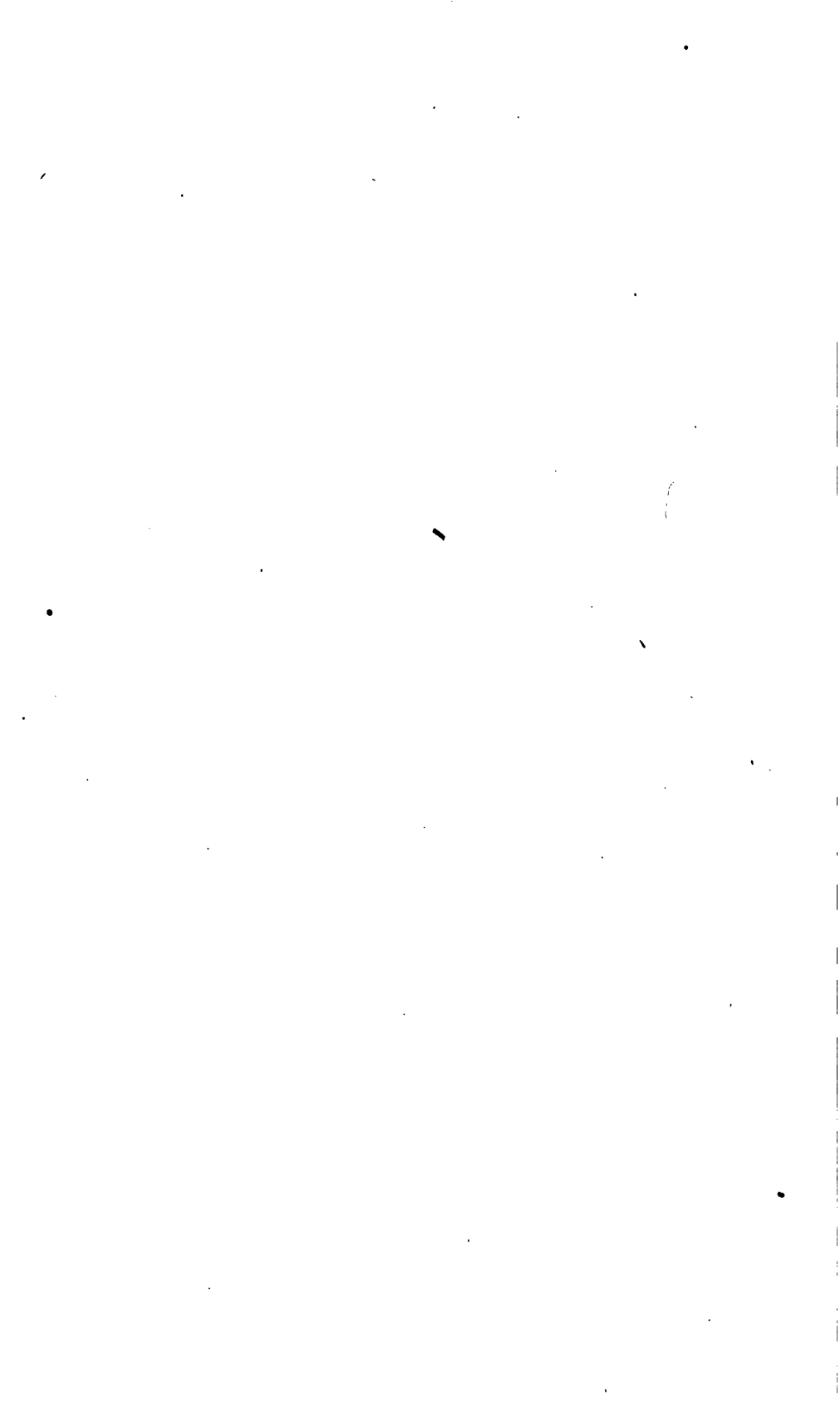
DAY ROOM, TALCOTT HALL.



Contributions to General Etiology and Pathology of the Insane.

By DR. ALES HRDLICKA.

- I.—ETIOLOGICAL RELATION OF TUBERCULOSIS TO INSANITY.
- II.—DISORDERS OF SMELL IN THE INSANE.
- III.—REFLEXES IN THE INSANE.
- IV.—INVESTIGATIONS AS TO COLOR-BLINDNESS AND SOME PSYCHO-
LOGICAL PHENOMENA IN THE INSANE.
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CONTRIBUTIONS TO GENERAL ETIOLOGY AND PATHOLOGY OF THE INSANE.

Mind, viewed objectively, is an undetermined nebula. It is a reality, that up to now has more or less eluded, through the subtlety of its nature, a physical reduction.

Mind is a great aggregation of phenomena, each of which has to have, if any natural-laws are at all patent, its specific re-action of force with matter, or briefly, a physical cause. Any such re-action must have a certain cause of its own, and produced, certain duration, greatness, a definite situation of transaction, and consequently be capable of detection and explanation. In order to understand mind completely, we must determine all these re-actions with their qualities, and this can be done, without contest, but in one way: through scientific investigation. Theories, inductions and deductions are of value only as shades, that fill, and thus, more or less adequately, complete our concept of mind, and are only to be viewed as predecessors of facts established, that are in the end to displace them and of which solely the knowledge, the science, will be formed eventually.

Investigation, to establish the final knowledge, must comprise Mind entire; that is, all its possibilities; or, what is equivalent, all the minds. To effect this, they must be conducted from a double standpoint, the free, healthy, or normal, and the hindered, or abnormal mind must be examined, and this each with reference to causation, action and results.

Much, though comparatively little, has been done in this field; man, in order to render himself to, and prove effective in the highest and widest biological study, had to wait until the steps to this position, the collateral branches of science, were construed and reached a sufficient solidity; in order to establish psychiatry as a science, he had to wait for physics, chemistry and physiology. He, while waiting, had to throw off the yoke of old notions and prejudices. And again, with the discernment of the

complexity of the various phenomena, he had to divide and subdivide his inquiries, and much time has been absorbed by gross analysis of the complex nebula.

At last he has achieved so much, that he is ready for the definite analysis on which he is to build his decisions, his queen-science. The subject is definitely divided; one class of scientists studies the normal, the other the abnormal mind, while the individual investigators are taking up one special point after another, gathering statistics, proofs and observations. Of the individual field for study evolved grand psychiatric institutions and the hospitals for mind-diseased are speedily becoming great and prolific laboratories. Many an obscure point has been already elucidated. Philosophies have been almost reduced to psychology, which locates man's most abstract functions in definite spots of the brain, definite cells, and speeds to the conclusion that their origin must be sought for in delicate bio-chemical and bio-physical changes of those organs. Spirit is the function of the human being. Insanity is no longer a product of a "Change of the humors," or an affliction of the "Soul;" we now know it to be, though we be unable yet in some instances to prove it thus openly, a series of diseases of the encephalon, and even the term, "Disease of mind," is used but figuratively. Out of the old confusion of form of the diseases we have arrived at an almost perfect clinical classification, with which entire disorders *sui generis*, as, for instance, general paresis appeared. But notwithstanding, there are still many and many points, particularly, in the realm of abnormal mind, where clear insight would be of the greatest practical value, over which we stay in the dark.

The study of pathology of the mind presents far greater obstacles than that of its physiology, and in the main is the imperfection of the latter. If we knew the normal, it would not be so difficult to find the abnormal. As it is, these two branches of one study go hand in hand, level to level, each one supporting and clearing the other.

At such a stage of science, it is decidedly the duty of every individual observer to gather, investigate, compare his experiences with others, and record whatever is found new or unusual. It was

this thought that led me to the examination of a number of subjects of mental alienation, of the Middletown State Homoeopathic Hospital, with reference to a few points that, even if touched upon by some authors and observed piecemeal by others, have not been as yet, at least to my knowledge and sources of finding, taken up specially and presented collectively. Thanks to the liberality of the superintendent of the above named asylum, Dr. S. H. Talcott, and his first assistant physicians, Drs. Allen and Kinney, I have been given every opportunity which I needed for the accomplishment of my work, the records of which I beg to present herewith.

Let me give a few sentences of direct explanation: As a glimpse at the heading of this article shows, I have examined the patients on subjects the reliable information on some of which requires a certain amount of intelligence and compliance in the subject examined, and thus it happened that out of about 1,150 patients placed at my disposition and actually more or less examined, I have not been able to pick out more than 400, 200 of each sex respectively, of suitable cases. The answers have been certified and supplemented wherever possible, from the patient's papers of admission and history, uncertain cases being classed as "doubtful." The physical examinations were conducted with the care and precision so necessary with the insane; the methods of examination will be discussed with each special division of the article.

As to the aim of my work, I beg to say it is not to establish any new doctrines or theories: I have examined, found certain conditions, have not found their laws cleared, and consequently consider myself authorized to present these conditions found both, as facts and as a source of further considerations.

I.

Etiological Relations of Tuberculosis to Insanity.

That tuberculosis bears some relation to insanity, and *vice versa*, has been recognized by all those who ever gave this subject

any attention; that the first disease could stand in any etiological relation to the second, has been almost entirely overseen, or but superficially passed over. The physician of the insane saw his patients die three to five times as often from tuberculosis as the sane people, and he, with few exceptions, concluded and concludes disease of the mind predisposes its victims to the consumption, prepares them for it, without recognizing that such a fact is only too liable to be reciprocal.

That it is only the predisposition that insanity in time induces, is self evident from our knowledge of the real originators of tuberculosis, as well as from experience, which shows us that the mortality from it in the modern asylums can be reduced to, and below the general outside average. As an instance, let me mention the Middletown State Hospital, where, among 1,100 patients, there has been no death from phthisis within the last year, during which I had the opportunity to become acquainted with each of the deceased before the *exitus letalis*, and with the majority of them at the autopsy table later. Nor is there any record of such a cause of death in the year previous; and at present, there are no more than four or five cases with consolidation, for the most part chronic, of the apices, with no one of the patients presenting any other signs of consumption. Such is the practical result attained by favorable climatic conditions of the hospital and strict hygiene, and it is only natural for it to be such; nevertheless I have no doubt whatever, but that the predisposition to phthisis exists among the inmates in this, as in like institutions, waiting only for the up to now here fortunately absent contagion. To the interpretation of this "predisposition" we will return somewhat later.

One of the first observers to point out some relation between these two diseases, was McKinnon, who as early as 1845, stated his conviction, that "the scrofulous and insane constitutions are nearly allied;" and that "lung-phthisis appears especially to stand in close connection with insanity." Landsberg (*Mania und Lungensucht*, *Rust's Magazine*, No. 64) believed that "insanity is often a result of phthisical dyscrasia." Hagan (*Allg. Zeitschr. f. Psychol.*, vol. 7) expresses in his statistical dates and article,

that the "insane are five times as subject to tuberculosis as the sane," and also that in the phthisical insanity is five times as frequent as in the non-tuberculous. "Tuberculosis may be both, a causative or modifying cause of insanity" (Skae, Regis, Van der Kolk, Ball); and in a similar sense speaks Morel (psychiatrie, '60).

Of contemporaneous authors it is Clouston who has rendered the greatest attention to the relations of phthisis with insanity, and he quotes, in his article on phthisical insanity in Tuke's Dict. of Psych. Med. the following: "Perhaps two-thirds, or even more of idiots and imbeciles are of scrofulous constitution" (Ireland, Idiocy and Imbecility).

Van der Kolk (Mental Diseases): "It is remarkable, that in the very same family some of the children suffer from mania or melancholia, and the brothers and sisters, who have remained free from these diseases, die of phthisis."

Guisian (Lecons orales sur les Phrenopathies): "Pulmonary tuberculosis appears to me to be in direct relationship with insanity; it is frequently seen in the descendants of the insane and in their progenitors."

Dr. James quotes Thompson as showing that as to heredity, the two diseases are similar in the following respects: 1. Transmission is from either parent. 2. The disease may appear in the child, before it is developed in the parent. 3. The disease may be transmitted by the parent without development in himself. 4. "Atavism is a frequent and important characteristic." To which Clouston adds: 5. "The age at which the two diseases are most commonly developed is somewhat the same." Clouston believes the greatest risk of insanity is where both, phthisis and insanity, existed in the same family, more so than when either exists alone. In his text book on Insanity this same author speaks thus: "It is surprising how often both diseases, phthisis and insanity, occur in different members of the same family. They are too frequent to be a mere coincidence. The constitutional weakness which tends to end in phthisis is, I have no doubt, akin, in some degree, under some conditions, to that which tends to end in insanity."

All these propositions seem clear, absolute, and the etiological

relation of tuberculosis to insanity would appear by them established. And still, strange to say, however positive and clear to the point the majority of these statements seems to be, and although the very words used seem to speak for it, yet the etiological bearing of tuberculosis on insanity is by no means recognized. Almost all the authors of these statements neglect their own words and turn them to proof of the only fact seemingly apparent; insanity leading to phthisical dyscrasia and thus more or less directly to the large percentage of deaths of this disease in the asylums. Some of the first statements on this matter, as for instance that of Landsberg, were ventured so early in the day of psychiatry, that they are but mere sighs to the lucid future. But with the late observers it seems a kind of unexplainable oversight, not to have given a fact apparently important and intuitively observed their more extended and allsided attention. Take Clouston; he will clear points of resemblance of the two diseases; he will recognize their mixed occurrence in the same families, and therefrom arising greater gravity of both disorders; he goes even further and expresses directly his conviction of their being akin in some form and degree one to the other—and, as the only consequence, he tries to establish a new form of insanity, the one with which tuberculosis, the developed disease already, is directly associated; the phthisical insanity, so called; he has no word for the phthisical dyscrasia. And similarly all others.

At such a state of things, it is undoubtedly necessary to look into the subject a little closer. The most direct way to determine a point of this kind, is by statistical investigation; but, before we take recourse to any statistics, let us see clearly what is really disease of the mind and what consumption.

Tuberculosis, taken abstractly, is both, a cause and a result of certain general, or constitutional, but especially pulmonic weakness, and this weakness, which may be transmitted from parents to the progeny and take distinct shades in different individuals, we call *dyscrasia phthisica*. What is really dyscrasia? The cells of the normal system have the during evolution acquired power of resisting the more common, harmful influences, a self-

preservative power, or a power of resistance. This power is compound. And again, there is a general resistance, or, that common to all the cells of the body, and there is the resistance of each individual group of cells, or that of the various organs. Being an established function of all the cells, such a resistance must have its representation in the nervous centers, as all stable conditions or properties of the cells have, and these nervous areas must be, besides appreciative, (1) active, or reactive; and (2) related directly with other parts of the central nervous system, and, all other functions being related more or less with the entire central nervous system, this must by analogy be the same. These are not theories, for we can prove them by many examples. All changes of the function, its centers, or their connections, must necessarily correspond and be directly proportionate to each other. Perfect centers will keep up perfect resistance, imperfect resistance, if of sufficient duration, will affect correspondingly its centers and these the nervous entity. A temporarily diminished resistance of an organ is, according to its kind, its respective weakness. Permanent diminution of some form of resistance of a group of cells, is a corresponding form of dyscrasia. Dyscrasia, defined, is a permanent, inherited or acquired, defect of some form of natural resistance of one or more groups of cells of the human body. Phthisical dyscrasia is a loss of that form of resistance of the body, and especially of the lungs, which when present hinders a man from acquiring tuberculosis. Insanity is result of various extensive disorders of the brain, an organ, that at once is an organ of appreciation of all condition of the body, and an organ that more or less directly controls every part of the body. Now let any constitutional weakness, tuberculous or other, become established through long continued outward causes—and, before the specific disease of the dyscrasia sets in, what have you found but that the brain really, the tropic, sustaining reactive centers are weakened correspondingly? in other words how will you explain “dyscrasia,” except as resting on a nervous basis? Now, a nervous, a brain weakness of any kind, any extent, is a disorder, insanity is due to a brain disorder, and — how far are we from one to the other? Every dyscrasia is, in a strict sense, besides the

condition of the nervous system in general, a mild form of mental alienation; and as such, can it be other but one of the predisposing causes of the graver general brain disorders, the graver forms of mental alienation: the insanities?

Thus, and thus only I wish my words to be understood. I do not believe, with all the apparent facts I have, tuberculosis to be a cause of insanity, no more than I believe rheumatism or paludism to be such, but I will maintain, as the result of my investigation, that the results of tuberculosis in any of their forms, in other words tuberculous dyscrasia of any kind, is, just as any other dyscrasias, the gouty, syphilitic, rachitic, etc., one of the causes of disease of the mind, or insanity.

Looking through psychological literature, I find I am not entirely isolated in the substance of these opinions, a fact which gives me much confidence in their veracity. For Ball insanity is "not a malady that commences, but one that finishes." (*Lec. sur les Mal. Ment.*, p. 34). Speaking of the heredity of insanity, C. Mercier (*Tuke's Dict. of Psych. Med.*) says: "Much more important is the fact, far too insufficiently recognized, that the factor that is directly inherited is not insanity, but an instability or disordered arrangement of nervous tissue, which allows insanity to occur; and that we must look for the heritable antecedents of insanity not alone in insanity itself as existing in progenitors, but in all maladies which display evidence of undue instability or disorder of the highest nervous arrangements." And Krafft-Ebbing (*Psychiatria*, '93, p. 170): "There is no doubt that all that weakens the nervous system and the propagative powers of a person, leads to neuropathic constitution and thereby to all possible nervous disorders of the progeny." "A person does not inherit insanity, but a tendency or predisposition to it. The tendency inherited from the stock, not only from the immediate relations. A predisposition to insanity is not heritage of something definite and known passing from one generation to another in a definite and constant way, but rather of an uncertain bundle of obscure tendencies, which break up into various distributions." Maudsley (*Pathology of Mind*, '95). And again Maudsley, in the same work

and edition: "It is not the insane variation that is inherited but a native fault or flaw in the germ-plasm of the stock."

Thus supported, even though the citations were not written by their respective authors with the same points in view, I shall no more hesitate to assert tuberculous dyscrasia as one of the predisposing causes of insanity, and that of insanity in general, and will proceed to the direct statements, which are to prove the proposition.

My investigation consists of inquiries, which to render reliable I have employed all the means in my power. The cases of tuberculosis in the families of patients examined were divided into near, which comprise the parents, grandparents, brothers and sisters, and parents' brothers and sisters; and distant, or all other relatives beyond those named up to second cousins. Of the near I have specially extracted yet those of parents. The 200 of each sex examined comprise the following mental disorders: Mania, acute, recurrent and chronic; melancholia, acute and chronic; paranoia, epileptic insanity, general paresis, imbecility, terminal dementia, and a few miscellaneous cases. The respective numbers examined were:

	Men.	Women.
Mania, acuta	8	7
Mania, recurrent.....	2	13
Mania, chronic.....	35	22
Melancholy, acuta.....	14	17
Melancholy, chronic.....	17	34
Paranoia.....	20	56
Epileptic insanity.....	18	7
General paresis	5	..
Imbecility	11	5
Dementia, terminal.....	50	25
Miscellaneous	20	14

The results, given in percentage, are as follows:

Mania, Acuta.

	Per cent.	Per cent.
Near	25	71
Tuberculosis in family:		
Absent	25	14
Distant .....	..	14
Doubtful.....	50	..

Mania, Recurrent.

	Men, per cent.	Women, per cent.
Near	50	53.5
Parents .....	..	23.5
Tuberculosis in family :		
Distant .....	..	15.5
Absent	50	7.5
Doubtful .....	..	23.5

Mania, Chronica.

Near	34	43
Parents	9	19
Tuberculosis in family :		
Absent	15	19
Distant	3	..
Doubtful	48	38

Melancholia, Acuta.

Near	35.5	65
Parents	14	23
Tuberculosis in family :		
Distant	7	6
Absent	21.5	12
Doubtful	35.5	18

Melancholia, Chronica.

Near	47	44
Parents	18	9
Tuberculosis in family :		
Distant .....	..	9
Absent	29	20
Doubtful	23	26

Paranoia.

Near	30	43
Parents	5	16
Tuberculosis in family :		
Distant .....	..	4
Absent	30	22
Doubtful	40	31

Epileptic Insanity.

	Men, per cent.	Women, per cent.
Near	28	57.5
Parents.....	5.5	..

Tuberculosis in family :

Absent	22	..
Doubtful.....	50	43

General Paresis.

Tuberculosis in family :

Near	40	..
Absent	40	..
Doubtful	20	~

Imbecility.

Tuberculosis in family :

Near	36	40
Parents .....	..	8
Distant	9	..
Absent	36	20
Doubtful	18	40

Dementia, Terminal.

Tuberculosis in family :

Near	22	44
Parents.....	22	18
Distant .....	..	8
Absent	26	16
Doubtful.....	52	32

The Total Average.

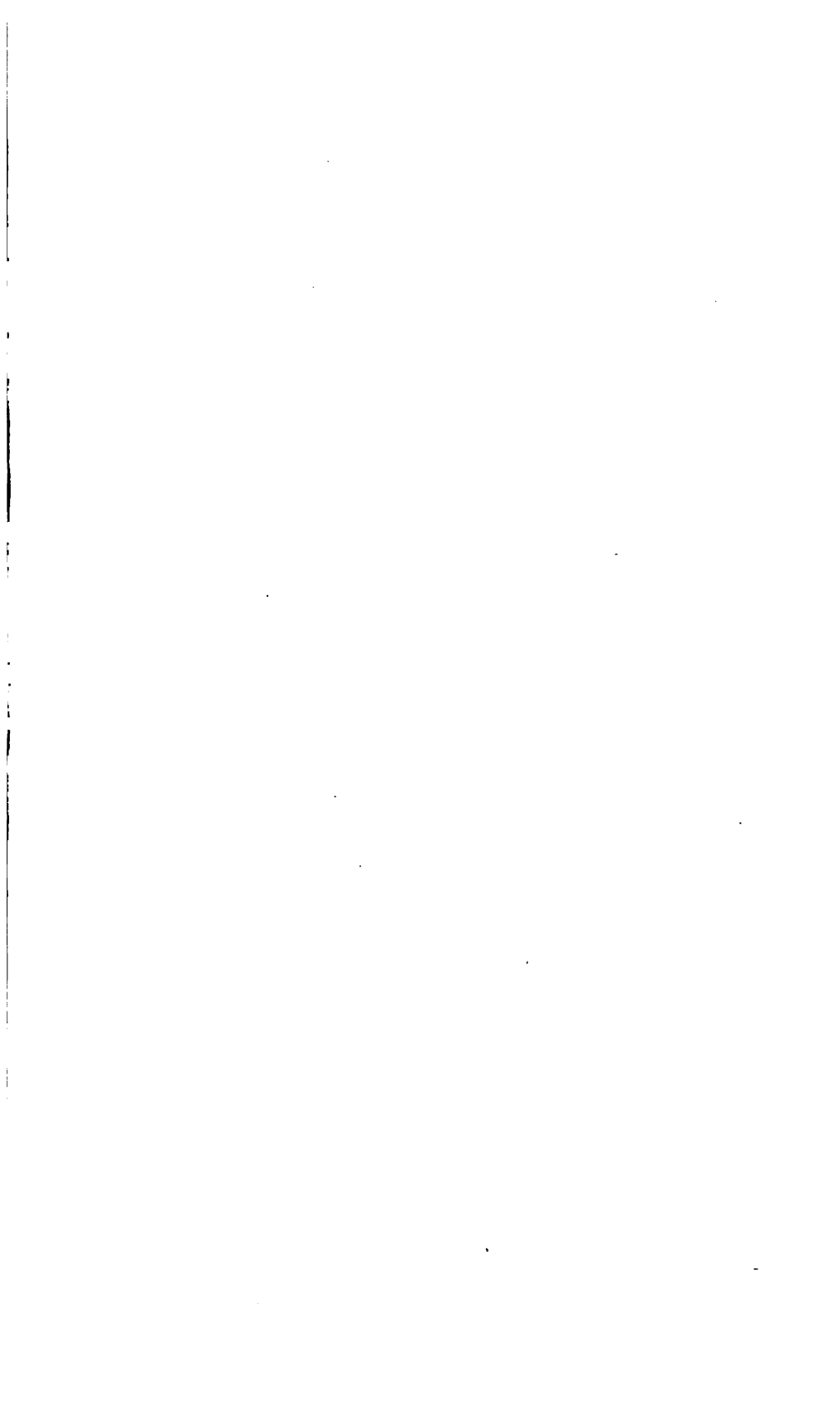
(Including few miscellaneous cases.)

Tuberculosis in family :

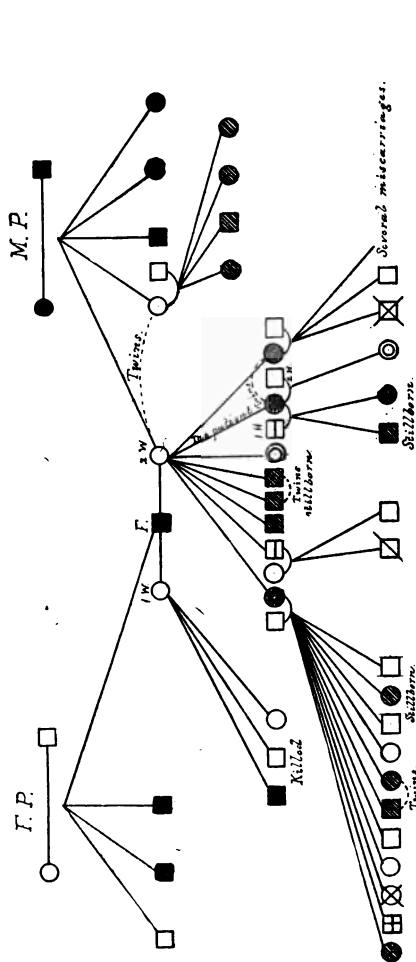
Near	32	47
Parents.....	9	17
Distant	2	6
Absent	25.5	17.5
Doubtful.....	40.5	29.5

Is more than a glimpse at these figures necessary to prove their importance? In men thirty-four, and in women fifty-three per cent. of tuberculosis in the family, and in the majority of cases of more than one member—could such phenomenon be without its value, without a considerable value? And these high numbers bear no trace of exaggeration, rather the reverse; the occurrence of the disease in the families of the patients is, if anything, greater, because: (a) Whilst cases of the disease in the immediate relation are remembered well, those in remote relation are not known of perhaps at all, or uncertainly, and such cases had to be included in the “absent” column; (b) in many cases there is more or less ignorance about the existence and whereabouts of the relatives, and consequently their fate is not known; in a few instances this ignorance included absolutely all the relatives, and these cases had to be classed with the “doubtful;” (c) in some cases the family history has been lost ever since the patient has been in the hospital, which might have been any period of the last ten years, and relatives might have succumbed to the disease in the meantime; some of these cases were classified with the absent (where the time was moderate), the rest with the doubtful; (d) some of the relatives, who might have transmitted the trait already and this produced its effects, may be still living and apparently well and may later, or may not at all, succumb to consumption; and (e) as only cases of pulmonary tuberculosis were inquired after, whilst the active disease presents many more types, which it would be impossible to ascertain, yet which can transmit the diathesis just as the pulmonary form, it is certain that many instances were omitted in this way.

The inheritance in the female predominates considerably over that in the male sex; it is a well known fact that the direct heredity of insanity is also greater in woman, and in somewhat similar relation of percentage, though I would not attach to this relation any specific importance. Both are due, no doubt, to the somewhat inferior resistance of the woman, and to the peculiarities of her mental and physical life. In the different forms of mental disease, if I may be permitted, for convenience, again to



Caso 4311.



T.P. fathers parents: M.P. mothers parents: F. father; 2^M. first and second wife; 2^M. first and second husband.

• plehizis - patients fashor. nazf. brozhor, fashors brozhor.

alcoholism - father's brother:

☐☐☐, viable consideration - own brother;

• arthritidis deformans; overpersus; cloazh from brain; connection at 16 - own sister;

insane - 2 own sisters; first ¹ mania, recovery; second ² paranoia; rational & paranoiac. Exciding

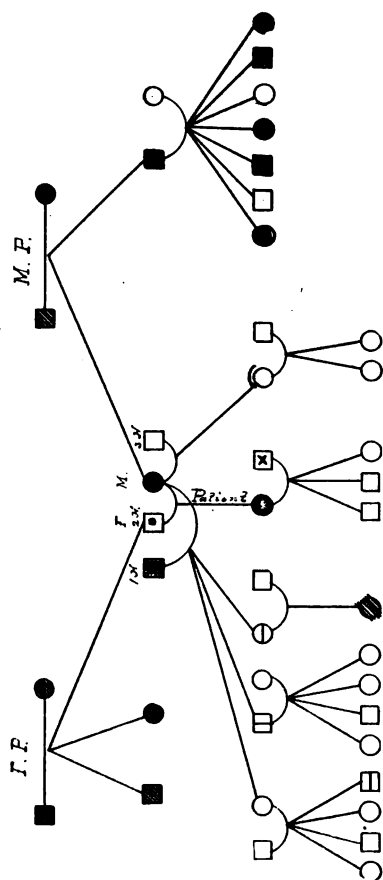
cause in all three - puerperium.

☐ = arthritic; very feeble; ☒ = precocious; ☉ = hydrosophical; born from the mother.

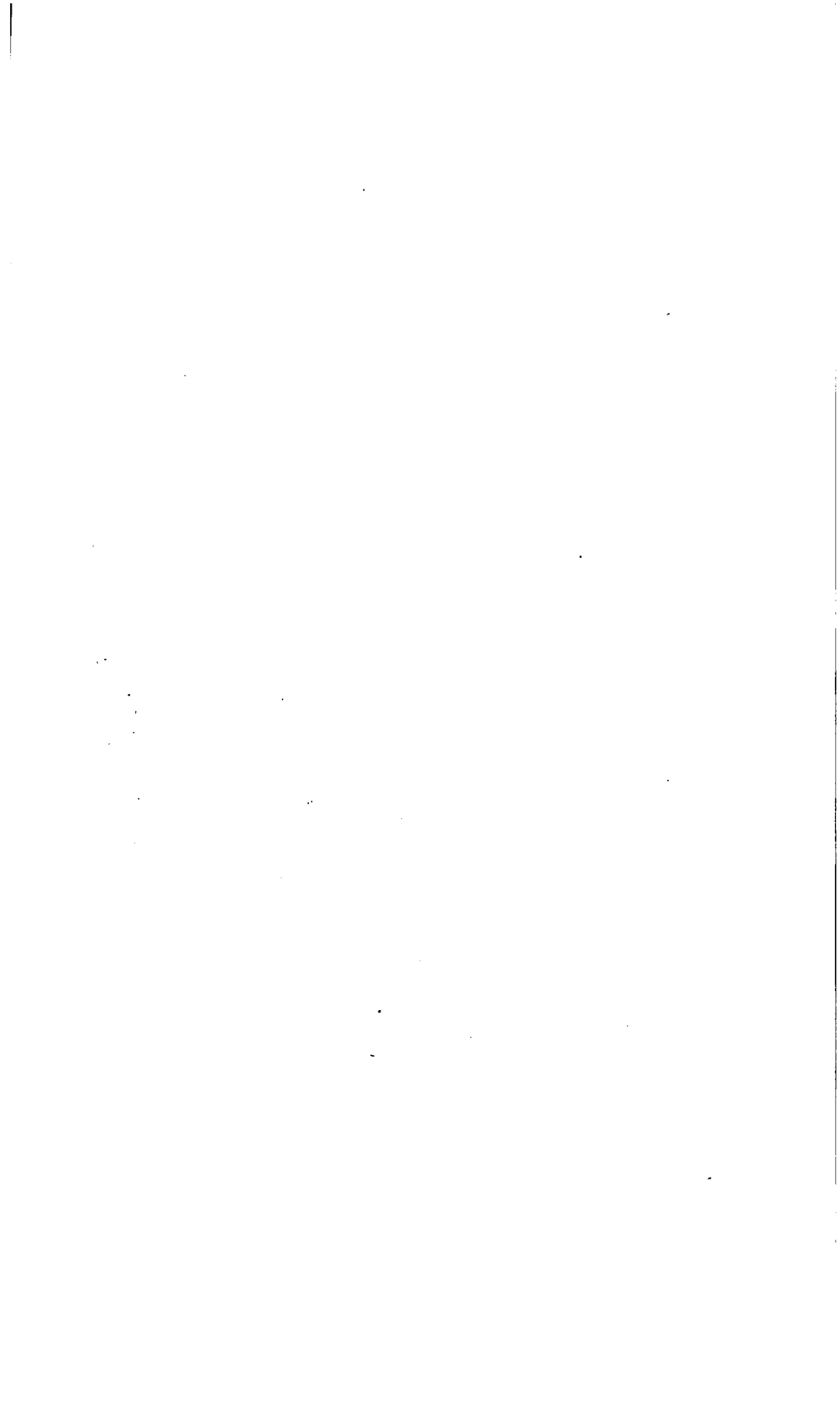
☒ rachetis; ● rachetis of epidemic; ● rachetis youno;

3

100

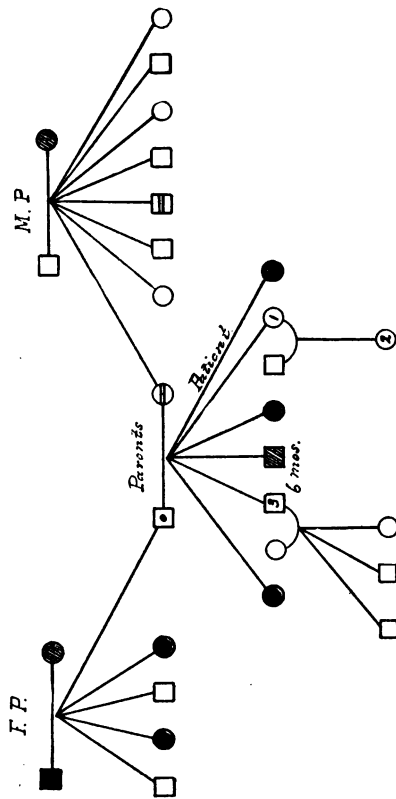


- - dead, cause unknown;
- ⊙ - male; the patient - paranoiac; had a visceral calculus; musical, poetic;
- - tuberculosis - mother, uncle, five first cousins;
- - visceral calculus;
- ⊠ - cancer;
- ⊡ - constitution feeble;
- ⊢ - mentally peculiar;
- ⊣ - subject to haemorrhages, depressible;
- - abscess of the brain, spontaneous; ○ - healthy or unknown.



III

Case 4171.



● - phthisis, granulofactor, two weeks and two sisters.

□ - dysentery, maternal granulofactor, father.

▢ - erysipelas (cerebral hemorrhage), mother, uncle.

① - cause unknown.

1 - feeble constitution, death at first child birth. 2 - maternal death, death in two weeks.

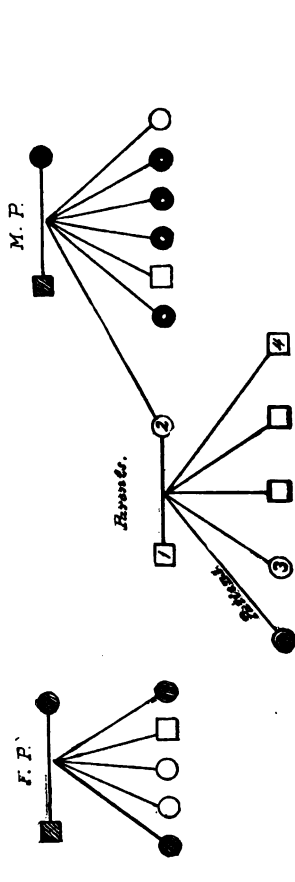
3 - chronic digestive trouble.

② - the patient's grandmothers' exclamation followed by maternal death at birth, mother's habit acquired

○ - healthy or unascertained.

IV

Case 2704.



○ normal;

● phthisis, mothers four sisters;

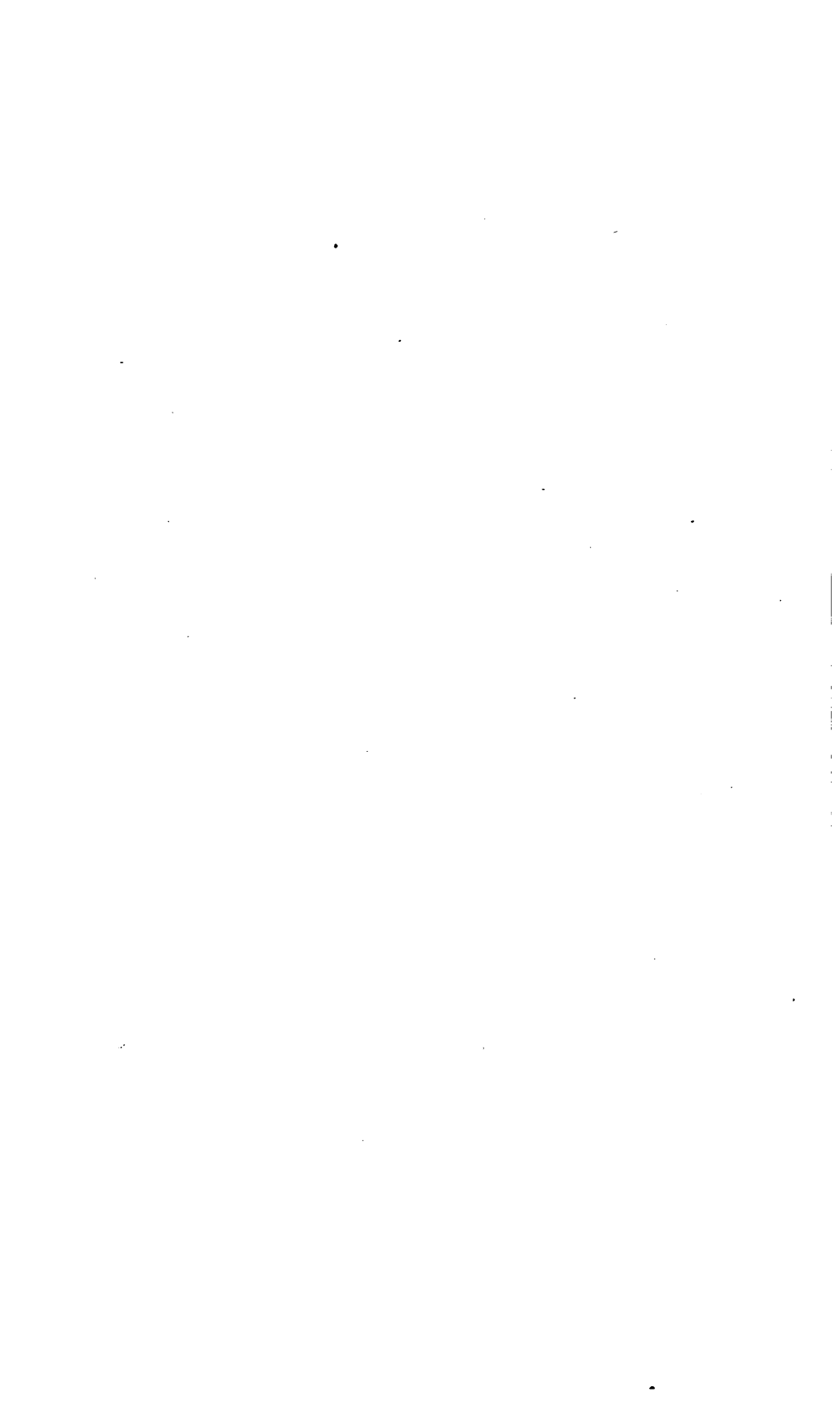
● dead, cause unknown;

1. father, died of Bright's; severe rheumatism for many years;
2. mother, fedde (always); chronic rheumatism; spontaneous cataract both eyes.

3. sister subject to neurasthenia;

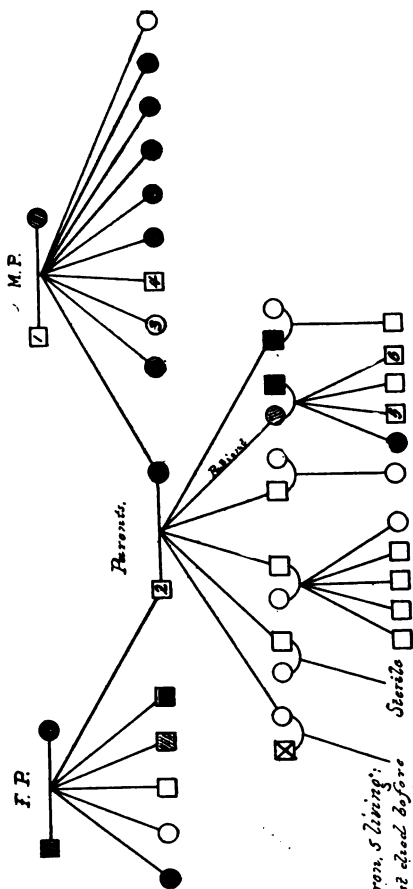
4. brother had epilepsy up to 20; chronic rheumatism;

● the patient hypochondriac melancholic; congenitally deformed, (internal organs of generation).



V

Case 1945.



13 children, 5 living;
all the rest died before
puberty; few were still born.
●, patients; insane at 35, religious mania, with political, dementia; cause, overwork.

- healthy.
- dead, cause unknown;
- phthisis, mother, her six sisters father's two brothers, own brother, a daughter
- 1. mother father, alcoholism, death of dysentery;
- 2. father, weak constitution; mind feeble when aged;
- 3. chronic rheumatism;
- 4. alcoholism, morphine habit;
- 5. marasmus, death at 9 days;
- 6. weak minded
- chronic lung cancer;
- asthma (cardiac?)

employ that ambiguous term, there is an accord between the two sexes only in mania recurrent, chronic melancholia and imbecility; in all the other forms of alienation the "tare" in woman predominates, though a due allowance must be made for the respective numbers examined. Considering everything, the usual and, especially with the insane, the possible errors of information, and again the only too probable existence of positive cases among the doubtful, I think we can safely venture to state, that some form of tuberculous heredity or other exists in from forty to fifty per cent. of male, and in from fifty-five to sixty per cent. of female insane patients. Shall we still further neglect, in our etiology of insanity, a factor of such a potency?

As a termination to my article, I beg to append several genealogical tables. Taken at random, they will illustrate better than many words, the degenerative conditions in some of the families of the included patients:

II.

Disorders of Smell in the Insane.

Should one ask me what relation the organs of smell bear to insanity, I should have to admit, to the full extent of the word, I do not know, just as I do not know exactly what relation any other organs of special sense can bear to the disease; nor have I found anyone else who knows or even pretends to do so. But among twenty consecutive autopsies I made within the last two quarters of 1894 and the first quarter of 1895, I found five cases, or twenty-five per cent. where the olfactory nerves were in far advanced or complete states of degeneration, a fact which led me to the subsequent inquiries and examinations, the abstract of which is here presented. These autopsies were all made within twenty-four hours after death, so that the conditions found could not have been due to post-mortem changes.

It is remarkable how little attention the pathology of the olfactory nerve has yet received. Ziegler, in his great work on pathological anatomy (6 ed.), finds no place for this nerve, and the same is nearly true for Klebs, Green, and other general patho-

logists. Rosenthal and Groves make a few general remarks on it. The first observer says (*Dis. of the Nerv. Syst.*, p. 187): "In insanity, in which subjective olfactory sensations exist, softening of the olfactory nerve, neoplasms of the base of the brain extending to the anterior lobe, softening or discoloration of the olfactory bulb, and adhesions of the olfactory nerves to the dura mater, have been discovered." Speaking of anosmia, he does not even mention its occurrence among the alienated. Gowers thinks (*Nerv. dis.*, '88, p. 567), "anosmia is less frequently due to a lesion of the nerve than to disease of the mucous membrane of the nose, chronic inflammations, polypi, etc.," and "in diseases of the cerebral hemispheres, loss of smell is rare," and "functional loss occurs in hysterical hemianaesthesia" (568). Alienists, like Tuke, Krafft-Ebbing, Griesinger, Spitzka, Hammond, Ball, restrict themselves to the simple consideration of smell hallucinations. Erb (*Ziemsens's Enc.*, vol. II, p. 262), acknowledges the existence of anosmia in the insane, but believes it "of central origin," and with similar results we may go from one investigator to another; and yet, direct examination on the living insane shows us a marked, to an absolute anosmia in thirty per cent. of the fair number of 400 examined, and all these were yet the more recent and lighter patients.

The same 200 of each sex were examined as in the first instance, and throughout, hence patients of enough intelligence to appreciate and respond to a feeling. Precautions were taken that each patient should know nothing of the nature of the examination before subjected to it. Cases of apparent nasal troubles or colds were avoided, or re-examined. In many cases the deficiency found was acknowledged as having been observed already by the patient himself.

The method of examination was as follows: Three test-tubes of a narrow calibre were taken and filled to about a half with (a) a ten per cent. solution of essence of peppermint in oil; (b) tincture of camphor; and (c) dilute ammonia. These test substances were not picked out entirely arbitrarily. They were chosen, first, as the most common and generally known flavors, and second, due to the

fact that many patients with a moderately dulled smell mistake one for the other, pronouncing *ol. menthae camphor*, and *camphor ammonia*. At about the upper end of the third fourth of each test-tube (from below), a somewhat tightly fitting sponge plug was placed; it served both as a preventive of spilling the contents, or some of the patients drinking them, and as a moderator of the odor.

Ol. menthae, having the most transient effect on the olfactory nerve of the three substances chosen, was used first in testing, and was followed by *camphor* and then *ammonia*, and enough time and trials were afforded before a decision was formed as to the state of the sense, in consequence there can not be, however delicate be such an examination, much error.

The cases as found were divided into three classes, namely, the normal, or about so, the moderately dulled, and the much dulled to absent. All those cases were classed as moderately dulled, which either had difficulty to recognize the test-substances, though familiar with them in general, or who would not recognize one or another at all. Positive anosmia is not easily decided. In many cases where the olfactory nerve is largely affected, the innervation of the fifth is normal or the sensibility of this nerve seems to be even increased, and stronger smells, esp. *ammonia*, are recognized by this sensation and not the smell proper, and hence all such cases were, to avoid false conclusions, included with the "considerably dulled." I would here call again an attention to the fact, that the 400 examined represent practically the lighter cases, in which we would not expect the worst.

Smell, where deficient, was found so in almost all the cases on both sides. No records of hyperaesthesia of the sense were made, and that from the following reasons: Hyperaesthesia of smell is in most of its insane owners only subjective, or rather a pathological condition of the centers, and on examination of the organ, really an opposite condition is found, that is more or less of anosmia. And there are forms of intermediary state of affairs, I am sure, where the beginning of the degenerative process of the nerve the condition is manifested as both, outwardly as dulling of the sense,

and inwardly as its hyperaesthesia. Of course we are absolutely unable to divide such different cases one from the other. True cases of hyperosmia, that is those not dependent on any organic changes, or at least any such of longer duration, are rare, are liable to be periodical and occur mostly linked with hysteria.

The epileptics form an interesting class of their own; they have all a pronounced hyperaesthesia of the nasal branches of the trigeminus, whilst the olfactory in almost all is greatly dulled.

The following are the brief results of the examination; may they throw some light on one of the obscure phenomena connected with diseases of the mind:

Mania, Acuta.

Smell :	Men, per cent.	Women, per cent.
Normal	37.5	57
Mod. dulled	50	29
Dulled	12.5	14

Mania, Reccurens.

Smell :		
Normal	50	46
Mod. dull	50	15.5
Dulled .....	..	38.5

Mania, Chronica.

Smell :		
Normal	37	48
Mod. dull	40	28
Dulled	23	24

Melancholia, Acuta.

Smell :		
Normal	57	60
Mod. dull	21.5	23
Dulled	21.5	18

Melancholia, Chronica.

Smell :		
Normal	29	50
Mod. dull	41	20
Dulled	29	32

Paranoia.

Smell :	Men, per cent.	Women, per cent.
Normal	40	43
Mod. dull	25	35
Dulled	35	22

Epileptic Insanity.

Smell :		
Normal	5.5	28.5
Mod. dull	22	14
Dulled	72.5	57.5

General Paresis.

Smell :		
Mod. dull	40	..
Dulled	60	..

Imbecility.

Smell :		
Normal	45	40
Mod. dull	18	60
Dulled	36	..

Dementia, Terminal.

Smell :		
Normal	28	32
Mod. dull	40	20
Dulled	32	48

General Average.

(Few miscellaneous cases included.)

Smell :		
Normal	34	44.5
Mod. dull	33	26.5
Dulled	33	29.0

III.

Reflexes in the Insane.

Insanity has, as yet, no concomitant pathology of the nervous system in general, with the exception, perhaps, of general paresis and a few specific disorders, nor do I think, with our present knowledge, any such can be formed. Nerve disorders are by no means infrequent in mental disease and may be in most instances proven to be due to it and dependent on it, but they are so variable in the same form of insanity, and again the same symptoms occur irregularly in so many forms of the disease, that we are incapable to form, with regards to them, many definite conclusions.

Whenever the nervous system participates in any pathological process, be it substantially or sympathetically, the first affected are usually the parts controlled by the sympathetic, next come the special senses, then reflexes, and finally the voluntary nervous apparatus — gray nervous tissue first, white last. A year ago (Middl. St. Hosp. Report for '95, p. 173), I made quite an extended inquiry into the defects of sight and hearing in the insane, this year it is those of the smell, and then reflexes. Feeling and taste, the remaining two senses, although an effort was also made to inquire into their condition, had to be left out of consideration on account of the insurmountable difficulties such an examination presents with the insane; suffice it to say in this place, that both these senses present, in this class of patients, many highly interesting and often unsuspected deviations from the normal.

Irideal and patellar, the most important and decisive reflexes, were investigated only; in irideal both were examined, the light reflex and that of accommodation.

True nervous diseases existing outside and probably before the insanity (a fact remarkably rare) were excluded. The results of this examination are as follows:

Mania, Acuta.

Light:	Men, per cent.	Women, per cent.
Normal	75.0	57
Diminished	12.5	43
Absent	12.5	..
Irideal:		
Normal	62.5	57
Accomd'n: Diminished	37.5	43

REFLEXES.

Patellar:		
Normal	25.0	29
Accomd'n: Diminished	62.5	43
Increased .....	..	29
Absent	12.5	..

Mania Reccurens.

Light:		
Normal	50	69.0
Diminished	50	31.0
Irideal:		
Normal	50	84.5
Accomd'n: Diminished	50	15.5

REFLEXES.

Patellar:		
Normal .....	..	15.5
Diminished	100	53.5
Increased .....	..	31.0

Mania, Chronica.

Light:		
Normal	77	86
Diminished	20	14
Absent	3	..
Irideal:		
Normal	68	95
Accomd'n: Diminished	29	5
Absent	3	..

REFLEXES.

Patellar:	Men, per cent.	Women, per cent.
Normal	55	53
Diminished.....	15	28
Increased	29	14
Absent	3	5

Melancholia, Acuta.

Light:		
Normal	78.5	83
Diminished.....	21.5	18
Irideal:		
Normal	93.0	89
Accomd'n: Diminished.....	70	12

REFLEXES.

Patellar:		
Normal	43.0	65
Diminished.....	35.5	23
Increased	21.5	12

Melancholia, Chronica.

Light:		
Normal	77	74
Diminished.....	17	23
Absent	6	3
Irideal:		
Normal	73	77
Accomd'n: Diminished.....	12	23
Absent	6	..

REFLEXES.

Patellar:		
Normal	29	44
Diminished.....	29	32
Increased	35	20
Absent	6	3

Paranoia.

Light:		
Normal	85	84
Diminished	10	14
Absent	5	2

Irideal:	Men, per cent.	Women, per cent.
Normal	85	87
Accomd'n: Diminished	15	11
Absent .....	..	2

REFLEXES.

Normal	40	54
Diminished	25	22

Patellar:		
Increased	35	20
Absent .....	..	4

Epileptic Insanity.

Light:		
Normal	94.5	100
Diminished	5.5	..

Irideal:		
Normal	94.5	100
Accomd'n: Diminished	5.5	..

REFLEXES.

Patellar:		
Normal	67	28
Diminished	22	43
Increased	5.5	28
Absent	5.5	..

General Paresis.

Light:		
Normal	60	..
Diminished	40	..

Irideal:		
Normal	40	..
Accomd'n: Diminished	60	..

REFLEXES.

Patellar:		
Normal	40	..
Increased	60	..

		<i>Imbecility.</i>	
Light :		Men, per cent.	Women, per cent.
Normal		91	60
Diminished		9	40
Irideal :			
Normal		100	80
Accomd'n : Diminished .....		..	20
Patellar :		REFLEXES.	
Normal		54	40
Diminished		27	40
Increased		18	20
Light :		<i>Dementia Terminal.</i>	
Normal		76	88
Diminished		22	12
Irideal :			
Normal		68	88
Accomd'n : Diminished		20	32
Patellar :		REFLEXES.	
Normal		46	56
Diminished		22	28
Increased		26	16
Absent		4	..
		<i>General Average.</i>	
Light :		(Few miscellaneous cases included.)	
Normal		79.0	79.0
Diminished		18.5	19.5
Absent		2.5	1.5
Irideal :			
Normal		77.0	84.0
Accomd'n : Diminished		21.5	15.5
Absent		2.5	0.5
Patellar :		REFLEXES.	
Normal		47.5	48.0
Diminished		25.5	30.0
Increased		23.5	19.5
Absent		3.5	2.5

There are several things of interest in the above numbers. The most striking is the great predominance of variations of patellar reflexes over those of the irideal (5-2). The second is the large number of cases where the patellar reflexes were increased (86 cases). And the third, which, however, is not seen from the table alone, is a very frequently found peculiar state of opposite conditions existing between the patellar reflex and that of accommodation — where this latter was diminished, the former in a large majority of instances was found more acute. The general truth is, that the conditions of the different reflexes very seldom correspond with each other, and that is valent even about their irregularities.

IV.

Color-blindness, etc.

“The proportion of color-blind is about five per cent. or less among men, and two per cent. or less among women; this includes all the varieties and degrees of the defect” (Noyes, *Dis. of the Eye*, p. 17); among the 400 insane examined, color-blindness was found in only two men and one woman, which means respectively one and one-half of one per cent.; and all these three cases were of a light character.

The method of examination differed somewhat from the usual one. Instead of using a skein of colored letters, solutions representing the seven rainbow colors were placed in narrow glass tubes, which were arranged in a frame of three by four inches. This method is very simple and, I believe, very efficacious. According to the inclination of the frame towards the light, the tubes may be brought closer together and where it seems necessary, the light may be transmitted through the tubes and forms almost a perfect spectrum on a white paper behind, which adds to the instrument a further value. I must acknowledge the almost negative results of this examination surprised me, though even with such a number the possibility of accidental can not be excluded.

The last class of phenomena I inquired into is of a pure psychological order and the most obscure; it comprises few of purely psychical inclinations as found in the insane patients.

It is commonly acknowledged that in every individual there is such a thing as a "nature;" a psychologist would state, every organization is slightly different from all others, and correspondingly different are its psychical manifestations; and both, the laic and the scientist, know, that there are certain classes of these "natures." They are natural or inborn inclinations of faculties and should not be mistaken for temperaments, which mean the ways of action and reaction of a being.

The inclinations of man's faculties are triple: Attraction towards an object; indifference to it; or aversion. Noticing these phenomena in the insane with relation to objects both well defined and of common interest: to the different sciences, I soon found some peculiarities that promised me a closer and extended investigation into the subject would not rest without a due recompensation. I decided to choose the sciences preferred in schools — when the being is guided by the most natural, his virgin inclinations, for it is these and not any that may have been acquired or modified by exigencies, duty or reason, that are of true and prime psychological value. The investigation was conducted necessarily entirely by personal inquiry with each patient; the method pursued was to ascertain first if the examined had or had not a sufficient education; next, if he had sufficient, how he learned; and last, which of the various branches of learning he preferred most. Here are the results:

Mania, Acuta.

Subjects preferred in learning:	Men, per cent.	Women, per cent.
Geography	12.5	43
Mathematics.....	12.5	....
None, or miscellaneous.....	25.0	14
Too little school	50.0	43

Mania Recurrens.

Subjects preferred in learning:	Men, per cent.	Women, per cent.
Geography	50.0	23.5
History .....	....	31.0
Mathematics.....	50.0	31.0
None or miscellaneous.....	....	7.5
Too little school .....	....	7.5

Mania, Chronica.

Subjects preferred in learning :	Men, per cent.	Women, per cent.
Geography	15.0	14.0
History	15.0	14.0
Mathematics	20.0	19.0
None or miscellaneous.....	3.0	3.0
Too little school.....	17.0	24.0

Melancholia, Acuta.

Subjects preferred in learning :		
Geography	7.0	18.0
History	21.5	50.0
Mathematics.....	35.5	18.0
None or miscellaneous.....	14.0	12.0
Too little school	21.5	6.0

Melancholia, Chronica.

Subjects preferred in learning :		
Geography	6.0	26.0
History	6.0	26.0
Mathematics	23.0	....
None, or miscellaneous.....	41.0	26.0
Too little school	23.0	20.0

Paranoia.

Subjects preferred in learning :		
Geography	25.0	16.0
History	10.0	31.0
Mathematics	35.0	7.0
None, or miscellaneous.....	25.0	31.0
Too little school	5.0	13.0

Epileptic Insanity.

Subjects preferred in learning :		
Mathematics	61.0	14.0
None, or miscellaneous	22.0	57.5
Too little school	17.0	28.5

Imbecility.

Subjects preferred in learning:	Men, per cent.	Women, per cent.
Geography	27.0	....
History .....	....	10.0
Mathematics	18.0	35.0
None, or miscellaneous	45.0	55.0
Too little school	9.0	....

General Paresis.

Subjects preferred in learning:		
Mathematics	80.0	....
None, or miscellaneous .....	....	....
Too little school	20.0	....

Terminal Dementia.

Subjects preferred in learning:		
Geography	12.0	8.0
History	10.0	8.0
Mathematics	22.0	4.0
None, or miscellaneous	44.0	60.0
Too little school	12.0	20.0

General Average.

Subjects preferred in learning:		
Geography	13.5	14.5
History	9.5	22.5
Mathematics	28.5	17.5
None, or miscellaneous	32.5	27.5
Too little school	16.0	17.0

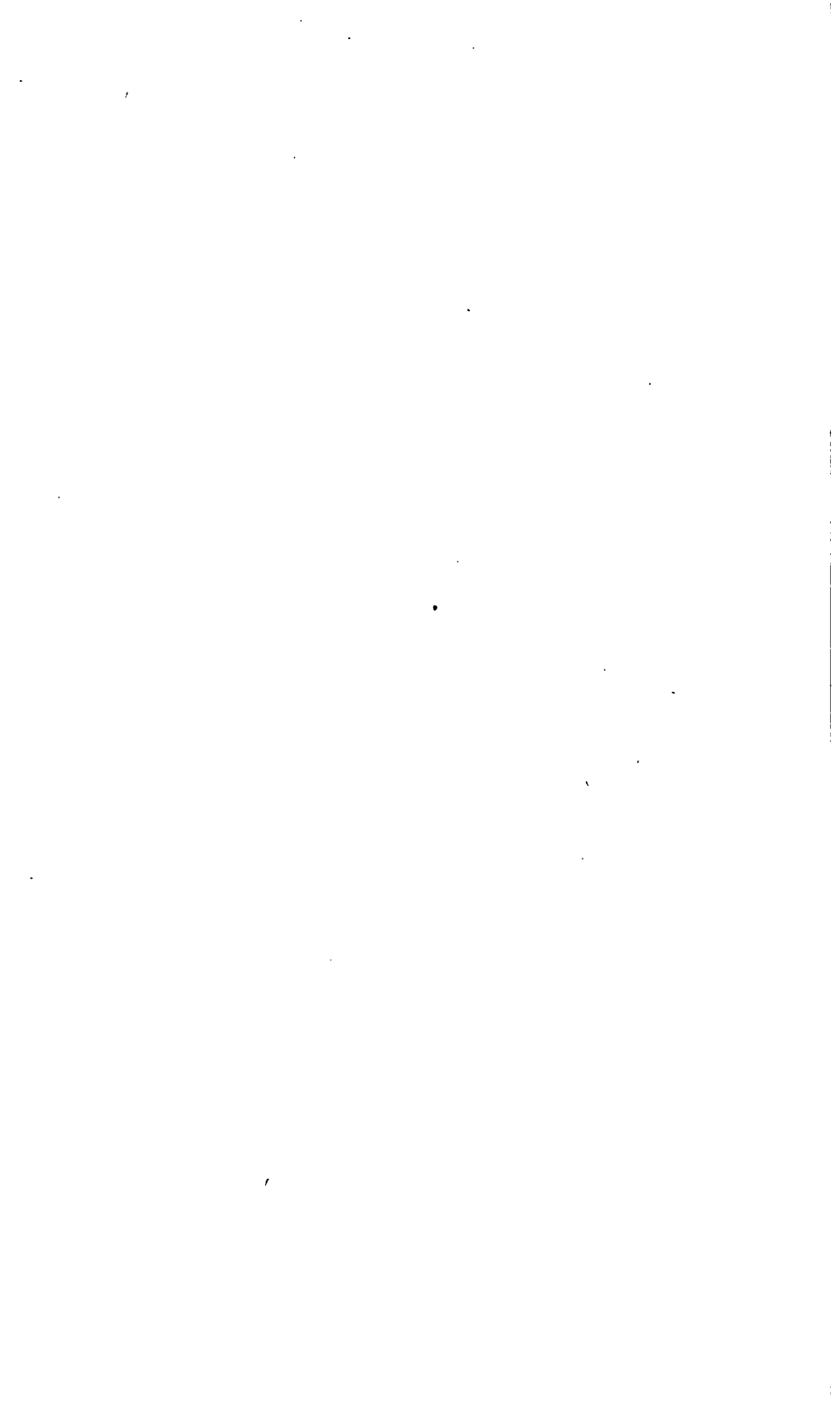
Several very apparent deductions can be drawn from the tables:

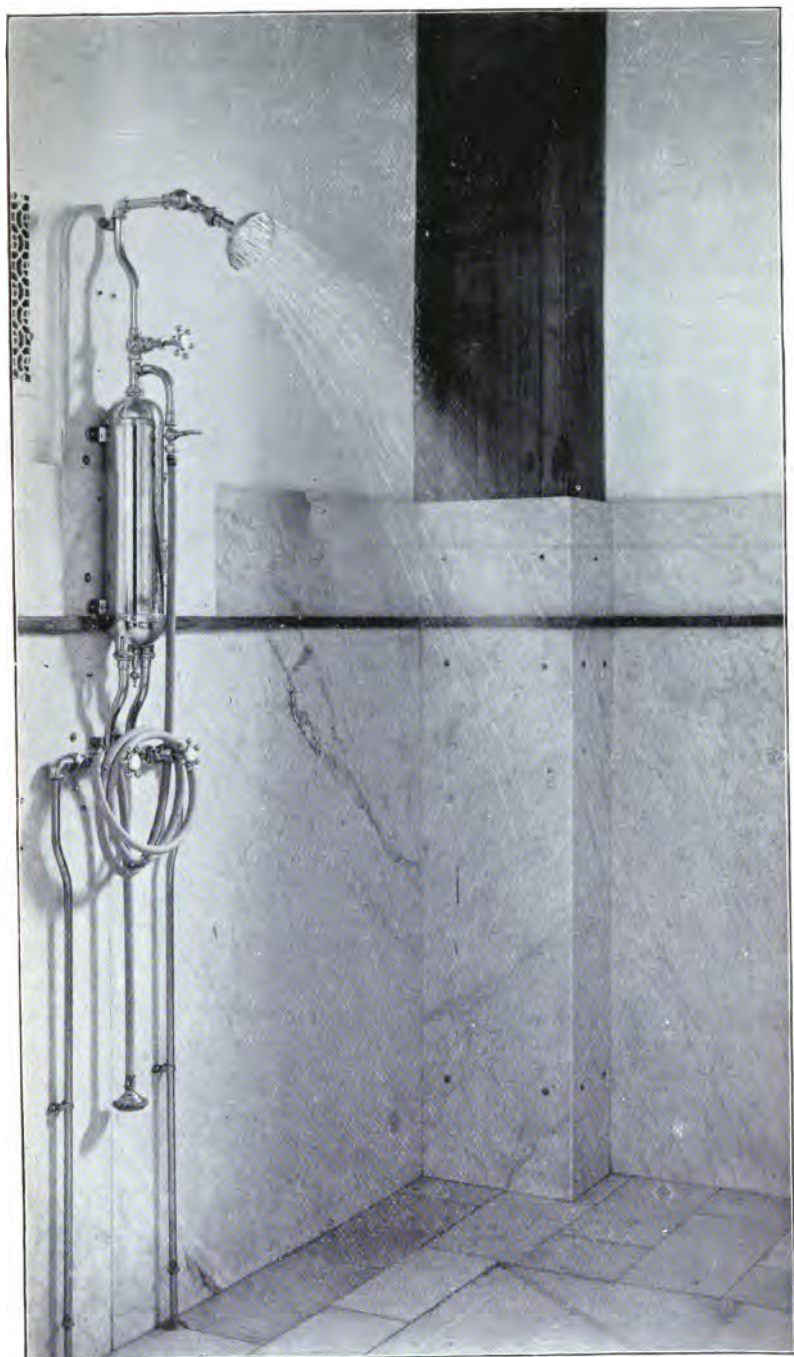
History (and abstract sciences) is much more favored by women and especially by the female melancholiac and paranoiac. Mathematics form almost an exclusive preference with the epileptics and in general paresis. Most indifferent and illiterate are among the terminal dementes.

Strong musical inclination is very prevalent (23 per cent.) among female, and slightly less among the male paranoiacs; but many of these insane soon lose the best of their qualities of composing, playing and singing.

Artistic tendency is very pronounced, and almost general, in several species of insanity (viz. Lombroso, *Genie*, p. 284); it is common with paranoiacs. I have several pictures made by paranoiacs, and that in some instances almost untrained ones, that are worth looking at, at least; and the local journal of the Middletown State Homeopathic Hospital bears many a trace of "insane" inspiration, that is worth a perusal. I regret the already acquired extent of my article prohibits me from introducing a few examples, and of speaking of this interesting subject more in extent. * * *

I conclude. I have tried to do my work sincerely, may it be thus accepted; and may its imperfections be only a stimulus to others!

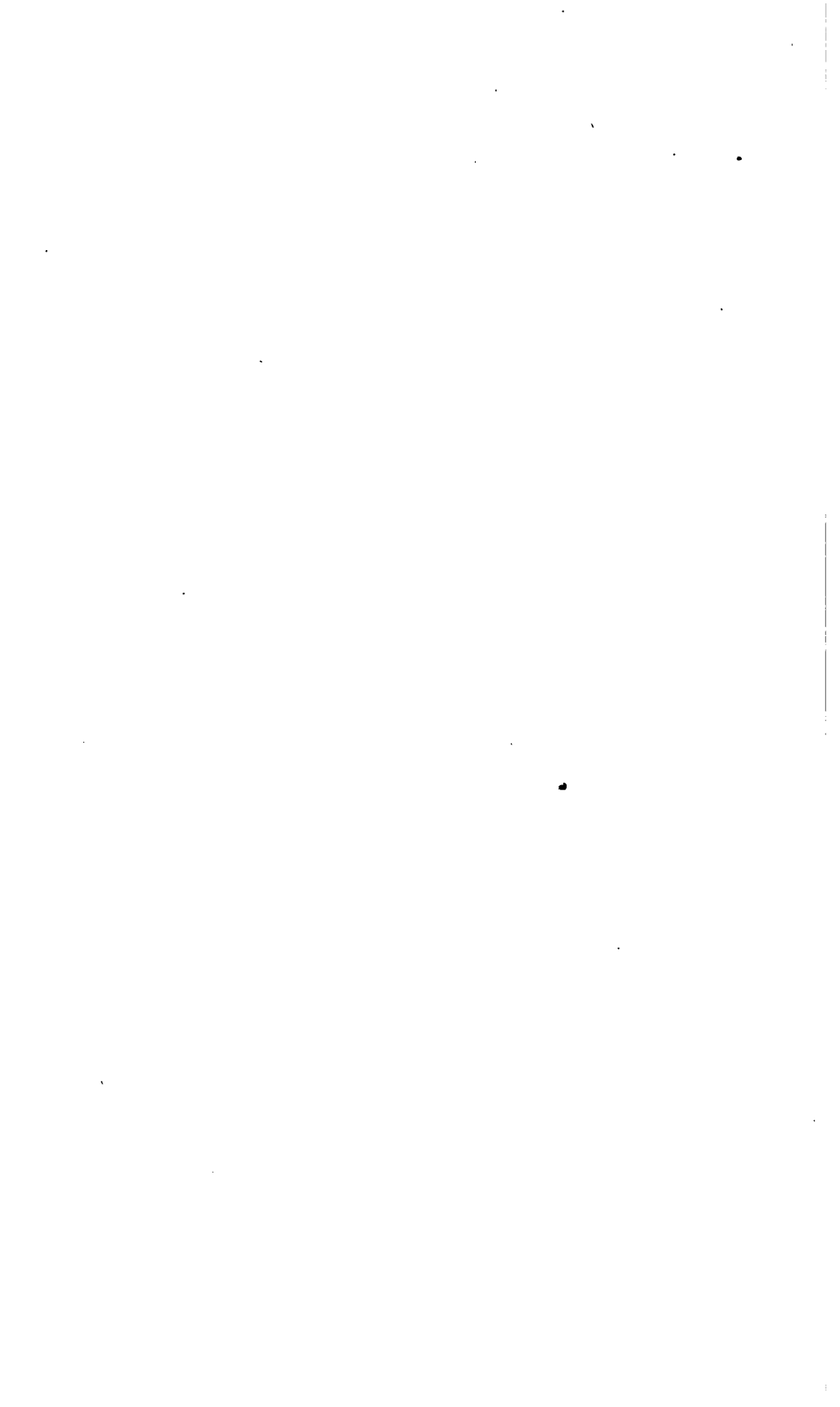




SPRAY BATH, TALCOTT HALL.

Twenty Autopsies Held Upon Cadavers of the Insane.

BY ALES HRDLICKA, M. D., Interne.



TWENTY AUTOPSIES ON THE INSANE.

By Dr. ALES HRDLICKA.

There is no richer, more promising and more important, but, unfortunately, more neglected field of pathological research, than the insane. Insanity, disease of the central and sympathetic nervous system, will not be understood, and consequently not prevented or cured until its pathology is known!

There are many that accept or proclaim similar propositions, but practice limps and very little is done. Money is spent on great institutions wherein to confine the affected, and only the least part of effort is left for that, which would ultimately prevent their being filled.

This state of affairs is by no means American — it is universal; the insane brains are the last objects of which the greatest pathologists think, and, consequently, the appropriators. It is this general condition of affairs, that makes of the twenty succeeding reports a mass of curiosities, with here and there a fact, but without real scientific value. Without place, without instruments, all that could be registered was what the eye, unaided, could see, and that is insufficient; I may just as well have amassed two thousand of cases instead of a score, they would be just as unfitted for drawing any specific conclusions.

Still, even thus, there are facts of sufficient interest to warrant a publication of these reports. And I hope sincerely we soon will be able to do better in this respect. Before this article comes into print, there has been, probably, taken an important step forward in this state — the establishment of general pathological laboratory for the State institutions for the insane, a fact mainly due to the efforts of Dr. C. F. McDonald, commissioner. May the next step be an establishment of local, well-furnished laboratories in each State hospital!

Middletown, August, 1895.

Case 1 (No. 2613)—General Paresis.

History.—Age, 41 ; married ; no children. A manufacturer ; education, academic.

Cause.—Excesses, sexually, tobacco ; no predisposition ascertainable ; first symptoms at 40.

Symptoms.—Forgetfulness ; would appropriate others' property ; distinguishes no more good from wrong ; listless, dull ; thinks he has large orders for his articles, and will buy boxes to ship the same in ; irritable. Indifferent in personal habits.

After admission, would not admit anything is the matter with him, though looking like a wreck. Is contented, though somewhat irritable. Tongue and lips tremulous and dry, walk slightly affected. Eats and sleeps well.

1890 (a year after admission).—Mind somewhat stronger ; takes better care of himself ; eats and sleeps well. Very weak limbs, though walking about ; slight injury (a bug bite) does not heal. Appropriates and hides articles ; untrustworthy.

1891-'94.—Occasionally bothered with accumulation of phlegm in the throat (paralysis of the constrictors). Frequent rheumatic and neuralgic pains especially in head. Intestines sluggish. Some vertigo ; few times a slight rise of temperature. Speech worse, walking difficult, bruises himself easily. Sleep and appetite good, in summer, '94, even improving. Two or three slight apoplectic seizures. Mentally weaker ; irritable, and would strike and abuse other patients ; cowardly ; religious.

August 27, 1894.—Sudden rise of temperature to 102. At 8 a. m. two apoplectic convulsions, followed later by others. Face very dark, pupils dilated.

August 28th.—Had another attack this morning ; temperature 105, pulse 152, respiration 51. Gradual failing. E. L. 3.08 p. m. High post mortem temperature.

Autopsy August 29th, 10 a. m.

External examination reveals no signs of degeneration, deformity, violence or disease.

Head, symmetrical, well developed ; measurements normal.

Cranium increased in thickness and very heavy, solid.

Meninges adherent in dots to the cranium and covered with

bloody sweat. Dura thickened; adhesions with the pia over the superior portions of the frontal and parietal convolutions, and also along the median line from the first frontal to the first occ. convolutions, and down to the calloso-marginal fissure in the median line. Meningeal as well as ventricular fluids much increased and slightly sanguinolent.

Both hemispheres anterior to the fissure of Rolando pale, anæmic; all behind this fissure engorged with blood.

Pia generally thickened and clouded over the third frontal, part of the first frontal, and all the parietal convolutions, and along the fissure of Sylvius way down to the Island of Reil. Over most of these places it is adhered to the brain substance, which tears very easily with it, leaving a granular, soft surface. Anterior to the fissure of Rolando both of the hemispheres appear diminished in size and the sulci are shallow.

Calcareous concretions, like grains of sand, are found in some of the meningeal adhesions.

Weight of the denuded brain, fifty-five ounces.

Cerebellum, medulla, pons and all other cerebral structures found about normal.

Thoracic organs.—Lungs, normal. Mediastinum infiltrated with fat. Heart, size normal; weight, ten ounces; the right ventricle contains a slender, pale clot among its papillary muscles.

Abdominal organs.—Stomach dilated; cardia stained with dot-like hemorrhagic spots. Intestines dilated. Liver, large, appearance normal. Pancreas hardened. Spleen normal, tough.

Kidneys somewhat softer than natural; capsule tears easily and the surface left is granular; pelvis filled with fat.

Other structures normal. All is imbedded in fat, which is abnormally developed throughout the body.

Case 2 (No. 3572) — General Paresis.

History.—Age, 44; a widower; brakeman.

Admitted July, 1892; duration of attack ca. two months.

Causes.—Excesses in smoking, drinking and probably sexually. Eloped with a female; stayed three weeks; deranged since the return.

Symptoms on admission.—Throbbing pains through the temples; pupils dilated; sleeps bad; no special physical symptoms. Behaves well, is quiet and simple; would get out of bed at night and want to go downstairs naked. Imagines constantly finding large sums of money, and returning the same to the owners. Thinks he has a contract to furnish a great number of children, and wants to do so at all hazards, but must of necessity get a wife to do it. Occasionally depressed. Later, somewhat irritable; eats and sleeps better; estimates his little estate as being worth thousands of dollars. To the end of 1892, severe bitemporal headache.

1893.—Temporal headache at times; grows weak in limbs and trembles; frequently restless. Appetite, good; sleeps well; bowels normal.

1894.—Gradually growing weaker. September, very nervous and weak; can not stand; somewhat noisy; first appearances of decubitus. Temperature slightly elevated (not above 101). October 31st, rapidly failing; temperature rises to and slightly above 103. Ex. leth. — 10:30 a. m.

Autopsy, November 1st, 10 a. m.

General examination.—The body shows all over a large fat deposit, the muscles are, however, wasted. Two large bed-sores over the glutei, and one over the left os calcis. Great toe nails very irregular and hypertrophied. Left testical hangs down much lower than the right, and is smaller. At the head of the left vas deferens, a large, pea-like, hard body is noticed.

Head normal, except in the occipital region, where the right side is more prominent than the left.

Section.—Head, scalp thick, very friable; skull-cap very thin, non-adherent; right occipital fossa more spacious than the left.

Dura mater adherent to pia all along the median line from the first frontal to the occipital lobes, and especially over the ascendant and superior parietals on both sides. There are also some weaker adhesions in the median fissure. Meningeal and ventricular fluids somewhat increased. Pia congested, especially over the posterior portion of the brain (behind the fissure of Rolando). It is cloudy over the anterior lobes, the ascendant, frontal and

parietal, and the superior parietal lobes; the cloudiness is very marked over the broader sulci. Adhesions to the brain tissue itself all over the frontal lobes, and somewhat along the median line. All the meninges irregularly thickened.

Brain appears symmetrical; weight, forty-two ounces. Convulsions well developed; gyri, deep; no marked softening. Base of the brain, pons, medulla, cerebellum and spinal cord normal. Basilar artery curved to the right.

Thoracic organs.—Heart, very flabby; fatty infiltration. Lungs, slightly emphysematous. Mediastinum filled with fat.

Abdominal organs.—Stomach, enlarged; some capillary extravasations at the cardia. Liver, enlarged; dark slate in color; friable. Spleen enlarged; tissue very dark and friable. Kidneys, large; fatty; in the pelvis of the right some rough gravel.

Bowels all dilated; the caput coli and sigmoid extremely so; walls very thin and translucent. All other abdominal organs apparently normal.

Testicles.—The veins around the left testicle somewhat enlarged and tortuous. The hard body is situated in the fibrous tissue between the head of the vas and the gland, and presents modulated, whitish, tough, very fibrous structure on section; testicle itself normal. Right testicle enlarged and hardened. Section reveals a tissue resembling closely a sarcoma.

All the internal organs thickly embedded with fat.

Case 3 (No. 3613) — General Paresis.

History.—Age, 32; married; one child, dead; a laborer, common education.

Causes.—Intemperance; probable remote; injury of the head.

Symptoms.—More or less insane for seven years; generally quiet; mental faculties sluggish; jealous; some hallucinations. Internal organs on admission (September, 1892,) normal; expression difficult.

1892.—Somewhat excitable; shooting paroxysmal pains through his temples.

1893.—Confused, incoherent; tears his clothing; very tremulous; speech difficult.

1894.—Helpless, pleasant, demented. July, failing; keeps head bent off the pillow for long periods of time. September, apoplectic attack; temperature rises high; death in coma (20th, 9:30 a. m.).

Autopsy, September 20th, 3:30 p. m.

General examination.—Body poorly nourished; musculature preserved; adipose tissue nearly absent. Few bed sores.

Head mesocephalic; depression over the posterior fontanelle and lambdoid suture. Mandibular angles, molars and frontal sinuses prominent.

Section.—Head, skull-cap very solid, heavy; on removing it some adhesions to the dura have to be severed.

Meninges covered by bloody sweat. Meningeal and ventricular fluids increased. Dura thickened and presents fibrous adhesions with the pia all along and on both sides of the median fissure.

Pia adherent, in close spots, all over the brain and can not be removed without tearing the brain substance. The membrane is full of capillary extravasations, but there are no real hemorrhages.

Brain.—The most anterior portions of both frontal lobes and the superior and the third occipital convolutions on both sides are perceptibly softened. The convolutions in general are small, the sulci shallow; the height of the convolutions from the surface of the corpus calosum is slightly less than one inch.

Other parts of the central nervous system apparently normal.

Thoracic organs.—Heart moderately hypertrophied, but this at the expense of its cavities, which are diminished in capacity; right heart partly filled with semiorganized clot.

Lungs bound by adhesions. The left apex reddish, emphysematous; the inferior lobe in the stage of hepatization (pneumonia); the upper lobe of the right lung in the same condition as the left apex, the lower two in a beginning of hepatization.

Abdominal organs.—Stomach, mucosa dotted all over with capillary extravasations. Pancreas, very hard and tough. Liver congested, almost black. Kidneys and other organs normal.

Cavities are very dry; all connective tissue structures very tough.

Case 4 (No. 4283) — Acute Alcoholism.

History.— Age, 35; single; a laborer.

Admitted November 15, 1894, in delirium tremens.

Cause.— Prolonged intemperance.

Symptoms.— Attack sudden; became dangerous, homicidal; hallucinations.

On admission, excited, trembling; characteristic hallucinations of sight and hearing. Temperature elevated; it rises to 104.

November 17th.—Very restless last night; quieted after 3 a. m.; died suddenly at 4.30 a. m.

Autopsy November 17th, 10 a. m.

General examination.— Body poorly nourished; no deformities or signs of violence; rigor mortis very marked.

Expression of face bewildered.

Pupils equally dilated; hemorrhage into the lower part of the left conjunctiva.

Head large, symmetrical; depressions over both fontanelles.

Post mortem changes setting in very rapidly.

Section.— Skull-cap thin, outer depressions show inside. Scalp was hyperaemic.

Dura adheres to the skull over parts of the frontal convolutions especially on the left, and over the median line. The membrane itself is hyperaemic, thickened over the adhesions. It shows several more or less recent ecchymoses, especially over the median sinus. There are adhesions between the dura and pia all along the median line on both sides, beginning with the asc(?) frontal convol.

Meningeal fluid somewhat sanguineous and increased in quantity.

Pia hyperaemic. Slight cloudiness over some sulci. No adhesions to the substance of the brain.

Weight of the brain, fifty-seven ounces; development very good; sulci deep and gray matter of normal thickness. Ventricular fluid augmented.

(Remarks.— After the brain was taken out a great quantity of dark liquid blood ran out of the vessels.)

Posterior clinoids situated obliquely. Some smell of alcohol.

Thoracic organs.— Pericardial fluid increased.

Heart.— Both ventricles are found in a state of acute dila-

tion (no hypertrophy accompanying). Heart and all blood vessels filled with dark liquid blood.

Lungs.—Pleuritic adhesions on the left; both lungs emphysematous and both congested posteriorly, especially the left.

Abdominal organs.—Stomach, vessels of the cardia widely dilated; walls thin, pigmented; some capillary extravasation.

Intestines hyperaemic. Kidneys, the right normal; the left enlarged and very congested; the borders of the pyramids are nearly black. Liver, much increased in size; weight, $5\frac{1}{2}$ pounds. Structure anaemic.

Case 5 (V Z)—Alcoholism.

History.—Age, 44; a lawyer; single.

Addicted to alcohol for many years past; lately also to morphine and cocaine. For the last six months under medical care in an institution.

Autopsy twelve hours after death.

General examination.—Body emaciated; left leg swollen; skin of a dusky tinge. Some decubitus on the hips.

Section.—Scalp and skull cap about normal; dura somewhat adherent to the bone, and along the median sinus and parietal convolutions to the pia. Pia clouded over the lateral aspects of both hemispheres, especially the left; its vessels hyperaemic, light red.

Meningeal and ventricular fluids much augmented.

Brain and other parts of the central nervous system present nothing abnormal.

Thoracic organs.—Upon opening the thorax, the left pleural cavity is found filled with about three quarts of dark-colored, odorless fluid, in which float brown masses of exudation. Both pleurae are found covered with similar masses, of which over a pound was secured. The left lung is nothing but a tough, impermeable, small, fibrous rudiment. Right lung tough, otherwise about normal.

Heart was displaced to the median line. Pericardium contains about a pint and a half of clear fluid. Heart itself normal.

Abdominal organs.—Stomach dilated. Pancreas, intestines

normal. Liver, yellowish, hobnail surface; size, about normal; weight augmented; capsule very adherent and thickened; structure, cirrhotic; lobules clearly separated, tissue very tough, nutmeg appearance wanting. Some bile exudes on pressure. Gall-bladder full.

Kidneys.—Capsules very adherent; structure tough, glistening build much less apparent than usual. Size, slightly increased.

All other organs about normal. The abdominal cavity and the scrotum filled with clear fluid.

Case 6 (No. 3717)—Dementia, Alcoholic.

History.—Admitted October, 1892. Duration of mental derangement, eight years.

Causes.—Predisposition; intemperance.

Symptoms.—Quiet, somewhat cranky; pleasant; very forgetful. 1894, anaemic; both feet begin to swell. Moderately demented.

September.—State aggravated, pressed for breathing.

October 7th.—Failing rapidly; ex. leth. at 4.40 a. m.

Autopsy October 7th, 11 a. m.

General examination.—Head of medium size, somewhat uneven. Ears irregular. Face, neck and upper part of the body emaciated; lower part of the thorax, abdomen and feet hydropic. Musculature meagre.

Section.—The surface of the skull irregular. Cranium very much thickened, to about twice and a half its natural size; thickness over frontal eminences and the occiput, good three-quarter inch; over the thinnest parts one-half inch. Very compact and heavy.

Membranes adherent to the cranium all over. Dura mater thickened especially over the median line. Adheres to the pia on both sides of the median fissure, from the superior parietal to below the first occ. convolution.

Pia cloudy more or less all over; its small vessels injected; it is free.

Brain somewhat darker than usual. Convolutions quite rare. No softening. Meningeal and ventricular fluids small in quantity.

Base of the brain, cerebellum, pons, medulla, basal ganglia and the cord appear normal.

Thoracic organs.— Upon opening the thorax a large amount of yellowish water wells out from the left side, which, on further investigation, is found in a far advanced stage of hydrothorax. The cavity is full of fluid and the heart displaced to the median line. The left lung is found atrophied to about one-third of its natural size. The right lung is bound all over to the thorax by old adhesions, and is also diminished, by compression, to about two-thirds its usual. Apices emphysematous.

Pericardium distended with similar fluid as the pleura.

Heart enlarged. Both right cavities dilated; both left dilated and somewhat hypertrophied. Tricuspid insufficient—post. cusp deficient and adherent. Mitral infiltrated with large deposits of calcareous salts. The bases of aortic semilunars infiltrated similarly. Pulmonary semilunars normal.

Abdominal organs.— Stomach, diminished in size to about two-thirds its natural. Walls thickened, mucous membrane found in a condition of chronic inflammation.

Liver.— Increased in weight and consistency. A pigmented body, the shape of a button, found on the posterior surface of the upper border of the right lobe.

Intestines full throughout; caput coli dilated.

Pancreas very tough; spleen similar.

Kidneys both much enlarged. The right found to be nothing but a trilobed, thin-walled bag of water, without any trace of kidney tissue proper. The mouth of the right ureter occluded by a black, hard, but drolling under pressure, irregular, uric acid calculus. Left kidney about twice the normal size, normal.

Moderate hydrocele.

All the other organs normal.

Case 7 (No. 4320)—Dementia, Terminal.

History.—Admitted January, 1895. Duration unknown.

Age, 83; a widower; a carpenter.

An ex-convict.— Wrecked a train.

Causes.— Age, mode of life; predisposition (?)

Symptoms.— Can give no account of himself; mental faculties generally dulled. Paresis of lower limbs.

After admission.— Will answer but little and incompletely; somewhat resistant and profane; deceitful and malicious; incoherent. Denies ever having done anything wrong.

April.— Demented, filthy.

24th.— Drops suddenly dead in bed after his shirt has been changed.

Autopsy.— General examination: Body fairly nourished. Skull unsymmetrical, larger behind and on left and in front and on right.

Section.— Scalp very resistant.

Skull of about usual thickness; dura mater adherent over the fore part of the cerebrum. Dura adherent with pia all along the median line, especially over the asc. and sup. parietal convolutions; no adhesions of pia to the cerebrum.

Brain poorly developed; convolutions rare. Olfactory nerves entirely degenerated. Some bloody liquid in the ventricles.

Thoracic organs.— Lungs normal.

Heart, ruptured; a very small opening, just admitting a usual silver probe, on the outside in about the middle of the left ventricle; inside the opening is much larger, discolored, and shows some dissection. The walls of the heart, without exception, are in good condition; valves normal, and so also the great blood-vessels.

Abdominal organs, nothing unusual.

Case 8 (No. 3442)—Paranoia.

History.— Admitted, March, 1892. Duration of mental disorder, two years. Age, 44; single; no occupation.

Causes.— Predisposition; exciting, physical disease.

Certificate.— Onset gradual; delusions of persecution, with a sexual tinge.

After admission.— Persecuted, especially by women; worrying; nervous; sleeps poorly; apprehensive; depressed evenings; fretful; stirs others.

Very little change till 1895; when the patient is rather better; he behaves well; writes, draws, is quiet; but his old delusions are still present, though covered.

March 11, 1895, 9:30 p. m.— Found dead at his bedside.

Autopsy, March 12th, 11 a. m.

General examination.— Body very well nourished. Face pale. Two slight bruises on the left frontal portions of the head. Rigor mortis feeble.

Only the thorax permitted to be opened.

Fat layer well developed; musculature feeble.

Lungs somewhat pale, normal; left bound by old pleuritic adhesions.

Pericardium distended, dark, fluctuating; on opening, a large amount of bloody serum wells out. On opening the sack completely a very large red clot of blood is found around the heart.

The pericardium forms a sheath-like covering of the aorta, from the heart up to the branching of the great vessels. This sheath is also extended and presents, on its anterior surface, about an inch above the auriculo-ventricular junction, a vertical, irregular slit of about one-third inch in length. The bag slit open, more bloody serum and clot escapes; at the base of it, however, and in front, there is a quite large, flesh-like, organized clot, surrounded with the injected in this place and discolored walls of the bag to which, as well as to the aorta, it is adherent. There is some, apparently not a recent, infiltration of the tissues in front of the bag (auricles).

Aorta is slightly dilated and unevenly collapsing for about two and a half inches above the orifice, and presents, in about the midst of this space, anteriorly and slightly to the right, a very much similar in every respect slit to that found in the bag of the pericardium. The aortic orifice is small; valves normal; walls are thinned, but becomes normal just before the arching. The endothelial layer is of a slightly yellowish color, and uneven, presenting the appearance as if some heavy liquid had been poured down the walls from above and corroded them (fatty degeneration-specific (?))

The heart is somewhat enlarged, with considerable fat on the outside, and somewhat softer muscle. Some clots in the ventricles. Both anterior flaps of the mitral somewhat deficient.

Case 9 (No. 3924)—Epileptic Insanity.

History.—Admitted 1889. Duration, since birth (epilepsy).

Cause.—Predisposition.

Age, 22; married; 3 children; a housewife.

Symptoms.—Religious; excitable; suicidal; at times abusive. Always feeble.

Died suddenly, after a severe convulsion, February 7, 1895, 1 a. m.

Autopsy (February 7th, 11 a. m.).

General examination.—Body feeble, fairly nourished; no evidences of injury; rigor mortis slight.

Thoracic organs (head not opened).—Heart ruptured on the anterior side of the right auricle. Several pus-sacks found in right auricle and one in left ventricle; the tissues of the right heart very soft and boggy.

Abdominal organs.—Liver engorged with very dark blood.

Other organs normal.

Autopsy by Dr. Ashley.

Case 10 (No. 4208)—Melancholia, Acuta.

History:—Age, 28; single; a coachman. Admitted August 4, 1894.

Causes.—Gonorrhea, orchitis; loss of work.

Attack quite sudden. Became violent, excitable, and again depressed. July 18th attempted suicide by shooting himself in head and abdomen; since then restless, noisy and profane, especially at night.

On admission quite reasonable, but somewhat depressed. Is very sensitive at times and then the least motion or touch gives him pain. At times appears to be in a kind of stupor and does not clearly comprehend what is said to him. Physically much reduced; tendency to decubitus. Wounds healing, especially that in the abdomen.

Later.—Is anxious to get well; says he will never try to injure himself again. Physical condition improving.

October.—Considerable gradual mental improvement. Thirteenth, despondent, would be dead; thinks he can not get well. Twenty-ninth, two epileptoid convulsions, with prolonged sleep after each. Does not know he had any attack.

December 17th.—Third convulsion, general; long sleep after.

January 1st.—Another convulsion. Several more within this month. Wound in the head does not heal. Has headaches, is irritable, unreasonable.

February.—Weak, depressed, refuses to eat, fault-finding; sharp pains in the right temple.

March.—Headache; groaning, sullen; sleepy; a good deal of nausea.

March 5.—Operation; three large pieces of bone found loose around the margins of the wound and removed. After operation patient is generally relieved.

Improving steadily until March 10th, when a severe headache set in; then well again until March 18th. At 8 p. m. that day, without any provocation or warning, the patient began to have convulsions, general, almost continuous, though not very severe; he became unconscious, begun to fail, the temperature rose to 103.5, and he died at 11.55 p. m. The only premonitory signs were, at 4 p. m., when his wound was dressed, slight vomiting, after which he remained somewhat weak and dull.

Autopsy, March 19th, 10 a. m.

General examination.—Body moderately nourished, symmetrical; face very anaemic. Rigor mortis very marked. Scrotum loosely pending, reddish-brown.

Signs of injuries.—A pouch-like, healed scar on the right side of the abdomen, two inches above the ant. sup. spine, in McBurney's line.

A rounded, with extruding tissues filled opening on the right side in the skull, one and a quarter inches above the tip of the mastoid process and two-thirds of an inch behind the junction of the external ear with the scalp. From this leading upwards and forwards an irregular, healed cicatrix (oper.).

Section.—Scalp thick, well nourished. In the immediate sur-

rounding of the wound and upward, along the incision line, subcutaneous tissues thickened, discolored light brown, and soaked with thick pus. Discoloration of the scalp-tissues from the wound all over behind. A bullet shell found imbedded in the scalp one-third of an inch below the lower margin of the wound.

On removing the periosteum, the opening in the skull is found to be almost regularly circular, of one-third of an inch in diameter. The edges are slightly serrated, but thin and dull. Running upward and forward, for two inches and a half, is a fracture of the skull, with both ends healed and the middle open, admitting the edge of the scalpel. Running backwards and downwards, in almost the opposite direction of the first, is a second fracture, all healed, and traceable for about one inch distance. Through the opening itself protrude, like a bunch, some velvety, but tough tissues; there is no discharge.

Skull-cap very thin, but mostly compact. Ethmoidal rostrum very high (three-quarters of an inch). No adhesions, no other signs of injury. The opening presents the same characteristics from inside, as it did from outside.

Dura hyperaemic; through it loom greatly congested vessels of the pia. Meningeal fluids diminished. Adhesions, moderate, along the margins of both hemispheres and the median fissure, from the first frontal to the first occipital convolutions.

Brain uniformly discolored flat-yellow, in consistency rather hardened on the surface. Right temporo-sphenoidal lobe soft; when partially lifted up, it is found surrounded by a small quantity of pus, which is similar in character to that found on the outside of the skull.

Around the wound, to the extent of three inches vertically and two antero-posteriorly, the dura is firmly adherent to the pia and with this to the brain substance, which appears dark-yellow. On trying to extract the brain with these adhered membranes, a slight tension induces a break in the brain tissue of the temporo-sphenoidal lobe, and from this opening wells out about an ounce and a half of thin, greenish, odorless, flocculent pus, and with it another small shell of a bullet. On closer examination almost the whole

temporo-sphenoidal lobe is found destroyed, what is not pus being softened. In the direction of the wound the finger detects some hard, irregular, firmly imbedded body.

The whole brain, minus the pus escaped, weighs fifty-six ounces.

The base of both brains very hyperaemic. Left half of the pons larger than the right. Further examination of the brain shows the following :

On cutting down to the hard body mentioned above, another, double cavity as it later proved, was opened, and from it escaped about twelve drachms of thick, also odorless, grass-green pus. These cavities occupied the position between the termination of the fissure of Sylvius, gyri supramarginal and angular and occip. occ. anter., and above the sulci temporalis superior and occip. lateralis. They did not communicate with the lateral ventricle.

The wound itself was situated in the first temporal convolution, underneath and behind the lower termination of fis. Sylvii, and extended for an inch and a quarter into the brain substance. The course of the wound was almost horizontal, and filled up with connective tissue; at its terminus were lodged, also enveloped in fibrous tissue, four small fragments of the skull, and the lower crushed half of a thirty-two calibre pistol bullet.

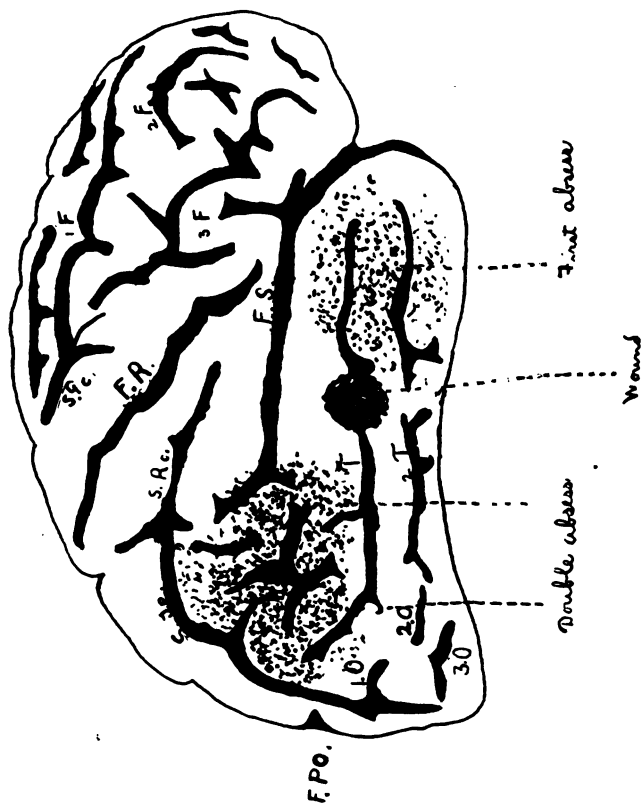
Gray matter of the cerebrum was found pale, rather thin. Ventricles were filled with clear fluid. Puncta vasculosa very numerous.

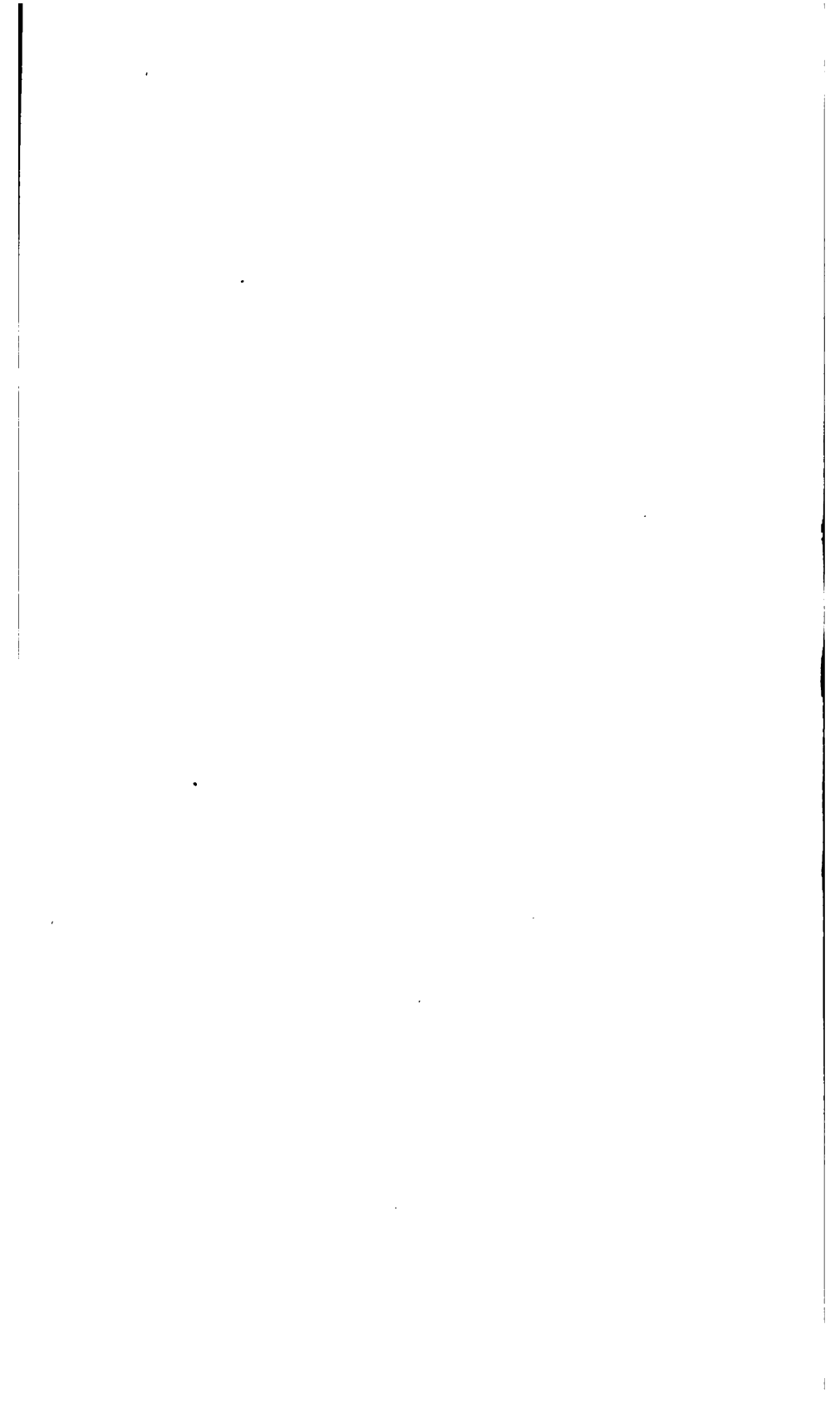
All other structures of the central nervous system about normal.

Thoracic organs.—Heart and great blood vessels normal.

Lungs, free, congested, especially the left, in a state similar to asphyxia. In the left pleural cavity about a pint of sanguinolent, dark, odorless fluid; no adhesions.

Abdominal organs.—The scar in the right hypogastrium extends straight down through the muscles and the peritoneum, presenting in its whole course a dark discoloration. The internal mark of it lies right over the head of the coecum—but neither this nor the underlying, very long appendix, nor any of the intestines or structures in the neighborhood show the slightest signs of injury, nor could the bullet be found after the most careful search.





Spleen, dark, congested, considerably enlarged; weighs fifteen ounces.

Kidneys congested. All other internal organs about normal. Both testicles in a state of subacute inflammation.

Case 11 (No. ..)—Melancholia, Chronica.

History.—Age, 40; single; a laborer; education and family history unknown.

Cause.—Doubtful.

Symptoms.—On admission, temperature 98.6; pupils dilated; bowels constipated; refuses food; would not speak. Certificate speaks of his attacks as being sudden, the patient becoming violent and dangerous, throwing his money and clothing about and breaking bed. He tried to hide, and again was seen chasing children.

Is depressed and obstinate; keeps his head covered; will eat only rye bread and cheese; wants to pray most of the time; will not take his medicine. Sleeps fairly well; masturbates some.

Resistive; eats poorly; careless in habits. Will bite and resist. Masturbating gradually increasing.

1894. — Losing flesh; demented; very resistive; has to be fed with the tube; soils his bed; never utters a sound; masturbates much.

August 4th.—Temperature suddenly rises, without discoverable cause, to 105, with pulse of 120, respiration, 40.

August 6th.—Patient failing. At 6 p. m. temperature 107, pulse 130, respiration 45. Ex. leth. 8:35 p. m.

Autopsy August 8th, 9 a. m.

External examination.—Body poorly nourished; a bed-sore over the right hip. Penis subnormal in size. Measurements of the skull about normal.

Head.—Scalp thin. Skull cap uniform, normal. Dura mater very vascular, engorged; vascularity most marked over the parietal convolutions, especially on the left, and over the anterior two-thirds of the left hemisphere in the median line. Adhesions of the membranes over the super. portion of the left asc. frontal and

parietal. The adhesions were irregular, blot-like, the anterior one on the left, the largest, exceeding in size a dollar. The pia in these places of adhesion was thickened, corroded and granular, but free from the brain all over. The whole pia very vascular.

Brain tissue appears normal, both in color and consistency. Both halves are symmetrical; the anterior lobes are small, the convolutions all over large, shallow.

The quantity of meningeal and ventricular fluids was rather subnormal.

Basal ganglia, pons, medulla, cerebellum and spinal cord normal.

Thoracic organs.—Heart, small, flabby, fatty infiltration; empty. Valves normal.

Lungs.—Apices much congested. Firm pleural adhesions on the right.

Abdominal organs.—Stomach, congested, otherwise normal. Liver very dark; attachments tenacious.

Spleen, wasted, small; capsule shrunken and wrinkled all over the surface; pulp tough.

Pancreas normal. In the neighborhood of the tail of the pancreas there are, imbedded in the mesentery, about twenty fair-sized calcareous concretions (weighing together about half an ounce).

All other organs about normal; membranes generally toughened.

Case 12. (H. M.)—Melancholia, Chronica.

Age.—Ca. 80; married.

Causes.—Some predisposition, otherwise unknown.

Symptoms.—Those of protracted depression of spirits, with considerable clearness of mind remaining.

Autopsy fourteen hours after death.

General examination.—Body fairly nourished; no abnormalities. Rigor mortis not very strong.

Section.—Scalp and skull about normal. No adhesions of the

dura to the skull; it adheres to the pia somewhat, along the median sinus, especially over the asc. and sup. parietal convolutions.

Pia cloudy, moderately, on the lateral aspects of both hemispheres. No adhesions to the brain.

Brain well developed, presents nothing abnormal; fluids small in quantity.

Base of the brain normal. All larger arteries are found in advanced atheroma; posterior half of Circle of Willis entirely obliterated, cord like.

No hemorrhages.

Thoracic organs.—Heart, hypertrophied, of about twice the normal size and thickness; this is especially true of the left cavities. Introstus aortae and semilunar valves — one mass of infiltrations; the orifice is considerably narrowed. Aortic walls, and those of larger arteries full of calcareous patches. Intima presents many yellowish spots.

Lungs normal.

Abdominal organs.—Everything normal, except the iliac (r.—) region, which presents signs of past inflammation.

Case 13 (No. 3135)—Dementia, Terminal.

History.—Admitted, April, 1891. A second attack. Duration unknown. Age, 45; single; pail-maker.

Cause.—Unknown.

Symptoms before admission.—Excitable; at times violent; talks very little, and mostly to himself; thinks he used to be very rich; somewhat filthy.

After admission.—Ideas of inferiority; will talk to himself; complains of feeling badly in the abdomen.

1892.—Demented; masturbates; filthy.

1893.—Works on ward; talks to himself; quiet.

1894.—Masturbates; some vomiting; pain and cramps in the epigastrium; occasionally an elevation of temperature.

1895.— Very pale; cachectic; vomits often; complains occasionally of pain over the stomach. Eats much, but grows thinner.

March.— Getting worse; moans at night; complains of pain.

Eleventh.— Suddenly failed, and died at two a. m.

Autopsy, March 12th, 10 a. m.

General examination.—Body symmetrical, but cachectic and very emaciated; abdomen sunken; traces of decubitus in several places. Neck full of scars from scratching himself for some time before death. Rigor mortis very strong.

Section.— Scalp very thin, fast adherent. Skull-cap thin; symmetrical; occipital bone thick; torcula very prominent (corresponding to a depression over the posterior fontanelle on the outside).

Dura of normal thickness; adhesions to the pia just over the ridges of the hemispheres along the med. sinus, most marked over the sup. parietal conv.

Pia hazy, distended with fluids; this is clear and cyst-like within the layers of the membrane; only small amount welling out at each puncture. No adhesions to the brain.

Brain well developed, heavy and apparently normal; olfactory nerves entirely degenerated. Gray matter pale throughout.

Ventricular and spinal fluids augmented.

Thoracic organs.— Lungs flabby; both apices present old scars and are bound by adhesions. Oesophagus very much thickened (one-fourth inch), especially below the arch of the aorta. Substance soft.

Heart, normal.

Abdominal organs.— Abdominal muscles, especially below the navel, discolored, dark slate-green.

Peritoneum somewhat adherent to the abdominal walls.

Intestines of a dull, darkened color; filled with faeces. Masses of dirty brown exudation lie on and among them in the lower part of the abdomen.

Stomach considerably thickened; very slimy; no stricture.

Duodenum.— The external wall of the first part, the common duct, the bile ducts, and the gall-bladder, are one white, glisten-

ing, almost cartilaginous mass of scirrhus. The center of the mass is the gall-bladder, of which nothing is left, but a small, empty cavity. The pelvis of the liver is involved and adheres to the whole mass; there are some metastases throughout the organ, mainly around the part directly involved. The mass adheres also to the peritoneum around to a part of the anterior wall of the aorta and to the right ureter.

Abdominal glands, normal.

Spleen, muscle-color; normal.

Pancreas, normal; duct somewhat implicated.

Kidneys, small; anaemic.

Other organs, normal.

Case 14 (No. 2835)—Mania, Dementia, Term.

History. — Age, 50; single; a housekeeper and seamstress. Admitted, January, 1890.

Causes of insanity, unknown. Insane more or less since 1868.

Symptoms on admission. — Excited; violent; destructive; foul and obscene; memory very poor. Will not eat; sleeps poor. Answers seldom and not unless it pleases her.

1892, January 12th. — Pain in the stomach all the morning.

September. — Mentally somewhat better; no physical distress.

1893. — No marked change; periods of excitement; occasionally noisy and boisterous.

1894. — Noisy; profane; obscene. July 7th, vomited nearly all night (no blood). July 10th, vomits her food since the 7th. August 21st, vomited supper and breakfast; pale, not eating well. August 30th, vomited dark, clotted blood at night; some pain. September, eats but little—clam broth and milk. Fifth, vomited some bright red blood; looks cachectic. Bad taste in the mouth. Liver seems to be enlarged. Seventh, vomited much in the night, bloody; this morning more blood; retains nothing on her stomach. Pulse weak, 120 degrees. Eighth, almost in collapse; urine stains clothing yellowish green; no food retained; bowels do not move; seems to have pains. September 9th, gradually failing all night; ex. leth. 7 a. m.

Autopsy September 9th, 9 a. m.

General examination.—The whole body is of a yellowish, semi-jaundiced color. No abnormalities; *panculus adiposus* well developed.

Section.—Only the abdomen was permitted to be opened. The fat layer over an inch thick all over. On division of the peritoneum a solid, large, whitish mass extrudes from the cavity above the umbilicus; below this nothing is seen but fat. On palpation this mass is found to involve the end of the lesser curvature of the stomach, the duodenum, the pancreas, and the bile-ducts. It is very hard, irregular, and composed of several larger aggregations, among which can be felt many variously enlarged and hardened mesenteric glands. On trying to remove this mass, it is found to be firmly adherent, along its whole posterior surface (ca. 7 in.) to the ant. spinal ligaments and the spinal periosteum; the aortic walls are implicated for several inches in these adhesions.

Extracted out of the abdominal cavity, the mass is found to be a scirrroid tumor weighing ca. three pounds and involving the following structures: Half to the lesser curvature of the stomach, in the form of closely neighbouring, irregular nodules; the pylorus, in the form of a concentric ring of about half an inch thickness and great toughness; the first two thirds of duodenum in the form of very profuse, disseminated nodules in the middle coat, the outer coat being involved entirely and left on the main mass in the other effort at separation; the duodenal third of the biliary, the whole pancreatic and common bile ducts—all involved but the mucosa; the pancreas—one scirrhouous mass, nothing being left of the organ itself but some softened, reddish remnants; the mesenteric glands and the mesentery itself between the stomach and the umbilicus—as varying in size, very numerous small masses and nodules; about six inches of the aortic wall, as an infiltration of the fibrous and muscular coats.

Stomach presents no gross lesions, except as indicated above. The pylorus transmits the little finger, is ulcerated and contains a bloody clot.

Liver.—Normal in size and consistency, but of a yellowish color throughout. On the ant. inf. surface is a large scar one and one-half inch in length. The upper border of the right lobe and its ant. sup. surface present each a whitish scirrhus nodule, of the sizes of a hazel nut and a bean respectively. The gall-bladder dilated and full of inspissated bile; a small scirrhus nodule on its surface.

Intestines filled with nearly black, semisolid material.

Spleen, very much diminished in size; weight, three ounces. Consistence and color normal. Kidneys normal. Mesentery very fatty.

Pelvic organs, uterus, virginal; consistence very tough; cavity filled with gelatinous matter and three nodules (submucous), which show scirrhus structure.

Ovaries, left, very rudimentary, no larger than a pea; right of the size of small chicken's egg and nodular throughout; section shows it scirrhus.

Thoracic organs.—Heart surrounded with fat, otherwise normal.

Lungs, apices adherent; the whole organs smaller than natural, pale. Apices, especially the left, show old cicatrices.

Bronchial glands all scirrhus.

Subcutaneous glands unimplicated.

Case 15 (No. 4115)—Imbecility.

History.—Admitted April, 1894. Duration of mental disorder, forty-five years.

Age, 55; single; no occupation.

Causes.—Traumatism of the head (?).

Symptoms before admission.—Dull, listless, speaking very little; irritable; addicted some to masturbation. On admission and after, emaciated and flabby; depressed; very reticent; easily angered; simple; memory poor. Answers very slowly. Remains in any position placed, but inclined to do reversely as told. Reads, but will thus only about horrible events, fires and funerals. Refuses food at times; is becoming somewhat filthy.

Temperature rises. The patient is very pale and weak, indifferent. September 21st, begun failing and died at 8:05 p. m.

Autopsy September 22, 10 a. m.

General examination.—Body tall, slender, poorly nourished; no signs of injuries or deformities. Head mesocephalic, regular, except a moderate depression over the frontal fontanelle. The lower half of the ear is larger than the upper. Measurements somewhat small, but normal.

Section.—The skull-cap normal; on removing it, the dura is found to be adherent all along the median line and also in few situations over the lateral walls. The dura itself adheres to pia along the median line from the frontal lobes to the occipital — the second and third frontal convolutions being alone spared. The adhesions are especially fast over the sup. parietal and first occipital convolutions, on both sides.

Pia free; some capillary extravasations into its layers in few of the lower sulci, especially the right Island of Reil. More or less cloudiness over the sides and top of both hemispheres.

The cerebrum appears normal, but the surface is very friable. Convolutions well developed.

Other parts of the central nervous system about normal.

Thoracic organs.—Heart somewhat enlarged. Right cavities filled with whitish clot, that extends for about three inches into the pulmonary artery. Left cavities both hypertrophied, mitral valve irregular, somewhat deficient, infiltrated with calcareous deposit.

Lungs.—Light in color, emphysematous, tough in structure: old adhesions on left.

Abdominal organs.—Stomach, walls thin, cavity somewhat dilated. Liver and pancreas normal. Spleen diminished in size, pulp brownish, friable. Right kidney in the stage of extreme hydronephrosis, the whole kidney and the pelvis are reduced to a tough, fibrous bag composed of many large chambers and containing about four ounces of whitish urinous liquid. There are left only the slightest traces of kidney tissue. The right ureter dilated

for about an inch, and there obtruded by a uric acid nephrolith. The left kidney hypertrophied, structure normal.

The bladder very hypertrophied, its walls measuring a fourth of an inch in thickness; the mucous membrane is dark.

All other organs normal.

Case 16 (No. 3617) — Idiocy.

History.— Admitted September 19, 1892.

Age, 40; single; no occupation.

Duration of present condition thirty-seven years; she was bright until her third year.

Alleged cause.— Traumatism of the head (fall on the back) at three.

Symptoms, before admission.— Filthy; does not speak; silor-rhoea. No mind. Grimacing occasionally. Does not take the slightest care of herself. On admission — physical condition fair. Subject to outbursts of temper. Music excites her very much. Filthy; restless; salivates continually. Has to be fed; frequent diarrhea.

1894.— Weak, pale; subject to diarrhea on the slightest provocation. Feet swell at times.

1895, January 2d.— Vomited several times; abdomen bloated. Later, vomited some blood and passed same from bowels.

Failing rapidly; ex. leth. at 2 p. m. (January 3d.).

Autopsy January 3d, 5 p. m.

General examination.— Body small, very emaciated, cachectic. Upper alveolar processes very protruding. Mammae rudimentary. Abdomen full, tympanitic over the geater part. Genitals small, hymen intact. No injuries; no decubitus.

Section.— Scalp thin, no scar. Skull very solid and about half thicker than natural; no adhesions between it and the membranes.

Dura mater very resistant; very few weak adhesions between it and the other membranes.

Vessels filled with liquid blood; brain somewhat anaemic.

Pia very resistant, non-adherent.

Brain small, hardly two-thirds of natural (thirty-seven ounces), harder than natural. Meningeal fluids very small in quantity. Convolutions long, winding, deficient; scarce on the surface of the hemispheres; in the median fissure, on the lower surface, and in the Island of Reil, the convolutions are almost obliterated, nothing being left but shallow tracings of the sulci.

Cerebellum similar to the cerebrum; vermes almost absent; transverse furrows very shallow, inclosed convolutions small, substance hardened.

Gray matter all over very thin and pale.

Pons, medulla and cord all small, resistant, and covered with very closely adhering, fast pia.

Thoracic organs.—Only the meagrest traces of adipose tissue found on section, both under the skin and around the internal organs.

Heart, small, right cavity filled with a recent clot.

Lungs almost white in color, crepitating strongly.

Abdominal organs.—Intestines; rectum, colon, caput coli, appendix and ileum normal, anaemic; the jejunum is found interrupted in its normal condition by two dark-red, full looking portions; the first of these is very near the duodenum, is nearly a foot in length, and dark red, the color intensifying toward the middle; the second portion is about two feet lower, is about one-half longer, and in the same condition. The blood vessels leading to these two pieces of intestine are prominent and dark—filled with coagula. The intercalated piece, as well as the other parts of the intestine are normal and without any unusual condition of their blood vessels.

The affected portions tear very easily; upon section, the dark red color is found to pervade throughout; the walls are at least twice as thick as usual; the valvulae conniventes are prominent and thickened; and the mucous membrane in general appears nude—without any localized abrasions or ulcers. In the cavity of these pathological portions of the intestines is found a small quantity of reddish thick fluid.

The condition is that of thrombosis with consequent gangrene,

restricted to two portions of the intestine. There was no adhesion of the serosa.

Duodenum normal, and so is the stomach; in this latter about an ounce of clear, limpid fluid. The coronary vein of the stomach, however, is found filled with a solid clot, which makes it very prominent; and in the same condition are found the veins of the pancreas, that of the spleen, part of the branches of the sup. mesenteric and, to some extent, the vena portae—an almost general, antemortal thrombosis of the portal system of veins.

Liver and spleen normal in size, but with consistency increased, especially the liver, which is decidedly cirrhotic, very heavy and anaemic. Pancreas enlarged, especially the tail, and hardened. On section a brown, hazel-nut like, oblong body, softened in center, is found in its interior.

Kidneys.—Right kidney considerably enlarged, furrowed on the surface, pale. On section it is found pale, but with no apparent structural changes. The left kidney is one large bag of very white, fluid substance, resembling somewhat pus, and without any trace of tissue proper left. No stone.

Pelvic organs.—Ovaries very small, equal, tough. Uterus, vaginal; substance slightly softer than natural, transset with small fibroids of all the varieties (as to location).

Case 17 (No. 3039) — Epilepsy, Dement., Term.

History.—Admitted December, 1890. Duration ———?

Age, 63; married; a seaman.

Causes——?

Symptoms.—Certif. Conscious of his condition; memory defective; dangerous after attacks. Naturally bright and fluent in speech, well educated; can not read clearly now.

After admission.—Acts like one thoroughly tired out and glad to be in bed. Fits not very frequent, but occasionally very hard. Addicted to masturbation.

Later.—Great number of attacks, sometimes over forty in a day; when free of them, is quiet, pleasant, industrious.

1892.—Some mania. June and July, works, quiet, pleasant; still many fits. December, talks in ambiguous manner and shakes his head in a knowing manner in speaking.

1893-94.—Many light fits; good-natured, cleanly, pleasant, working; at times seems in deep thoughts.

1895, January.—Convulsions number about twenty-five per day. On 9th, the temperature rises to 104, and continues higher; Ex. leth. January 17th; before death restless, muttering, incoherent; could not swallow.

Autopsy, January 17th, 4 p. m.

General examination.—Body powerful, symmetrical, very well nourished. No signs of injuries; slight decubitus in the left arm-pit. Musculature and osseous system very strong.

Rigor mortis marked. Abdomen inflated.

Section.—Scalp of normal thickness, but very resistant, so it can hardly be reflected.

Skull thicker than man in white race. No signs of past injuries. Left frontal portion somewhat smaller and thicker than the corresponding right.

Dura Mater adherent to the skull-cap to the extent of about an inch all along the medium line. It is covered with bloody sweat, and is found united by very firm adhesions to the subjacent membranes all over the left frontal lobe and for more than half an inch on both sides of the medium sinus from the frontal to the occipital lobes. These latter adhesions can be severed with difficulty only; they are fibrous and very resistant; those over the left frontal lobe can not be separated at all and the meninges, which are practically grown together here, can only be removed with parts of the brain-tissue. Some slighter adhesions are found within the medium fissure, but in the region of the left anterior lobe they are just as firm as the surface; and almost all over the inferior surface of the large brain (base). Meningeal and ventricular fluids augmented.

The blood-vessels of the pia are engorged; the membrane itself

is duller all over, more so on the left; a spot, in size of a silver dollar, over the top of the asc. front. convol. is very cloudy and opaque. Here the pia is slightly adhered to the brain, and so it is, but in a much higher degree, over the frontal lobe.

The brain is well developed and heavy. Cranial nerves intact. Left anterior lobe, and slightly the whole left hemisphere anterior to the occ. convolutions, softened; occ. on both sides appear to be the healthiest parts of the brain.

Cerebellum as a whole markedly softened. Basal ganglia, pons, medulla and spinal cord large, apparently normal; basilar artery very wide.

Thoracic and abdominal organs were all found almost normal. The spleen was diminished in size, and the heart slightly hypertrophied. Rib-cartilages ossified.

Case 18 (No. 1587.)—Paranoia—Dementia.

History.—Admitted, January, 1885. Duration of mental disorder, ca. four years.

Causes.—Remote predisposition; injury to the head when a baby.

Symptoms, before admission.—Hallucinations of hearing; writes letters and proposals to ladies he is but little acquainted with; speech disconnected; symbolical. Considerable masturbation.

After admission.—Physically well. Face flushes readily; pupils commonly dilated. Confused in actions. Masturbates.

1887.—Pleasant; demented.

1888.—Mischievous, untrustworthy; otherwise no change. Some sexual excitement.

1889.—At times irritable, cross; masturbates. No material change before 1895.

1895.—Kleptomaniac tendencies; masturbation worse; no ambition; anaemic.

June.—Elevation of temperature; it keeps up more or less till 18th, when the patient succumbs at 4:05 a. m.

Autopsy.—General examination—Body well nourished, but very livid; much loose fat in the integument, especially over the abdomen; rapidly advancing decomposition (six hours after death).

Section.—Scalp and skull about normal. Dura adherent to the skull and to the pia along about the middle three-fifths of the median line, especially over the sup. parietal convolution. Pia free, its vessels injected; meningeal and ventricular fluids somewhat augmented.

Brain, dark, frail; especially the pons, medulla and cerebellum. many puncta vasculosa in the white substance.

Thoracic organs.—Heart, small, normal.

Lungs, normal; lower lobes in state of hypostatic congestion.

Abdominal organs.—Nothing unusual, except about the stomach; which is very narrow, not much more spacious than the colon, with walls uniformly thickened.

Case 19 (No. 3339.) — Dementia, Senilis.

History.—Admitted November, 1891; first attack; duration of case five years.

Age, 85; a widow; no children; no occupation.

Causes.—Unascertainable

Symptoms.—Irritable, suspicious; threatened suicide and homicide; ideas of persecution; scolds, threatens.

April, 1893.—Sight disturbance; sees an animal on the ceiling; other hallucinations of sight.

May, 1893.—Dyspnoea, spells of sinking; diarrhoea, cramps in legs.

Behavior pleasant, with occasional scolding spells.

July, 1893.—Some hemorrhage from the bowels.

1894.—Quiet, gentle most of the time; sometimes abusive and suspicious.

January, 19th.—Some dyspnoea, gradual fall into unconsciousness following; died, without recovering her consciousness, January 20th, 3 a. m.

Autopsy January 21st, 9 a. m.

General examination.—Body fairly well nourished; skin of a yellowish hue; no abnormalities. Slight decubitus. Rigor mortis mod.

Section.—Abdomen and thorax opened first. Tissues flabby.

Abdominal organs.—Liver and kidneys anaemic, especially the latter. Spleen small, of a very dark chocolate color. Other organs about normal.

Pelvic organs.—Uterus and its neighborhood in a state of fibroid, both ovaries in that of cystic degeneration. The body of the uterus very small, atrophied, os uninjured, walls filled with small fibroids some of which resemble cartilage. The position of the left tube is occupied by a fibroid larger than the uterus itself. In place of the left ovary there is a cyst, larger than a goose egg, enclosing a clear fluid. The right ovary is occupied almost entirely by two small cysts, there being but little of the ovarian tissue left between them.

Thoracic organs.—Lungs normal.

Heart.—Considerably hypertrophied; right side slightly dilated; left ventricle very much thickened, to more than twice its natural thickness; mitral valve thickened; aortic valves and the whole introitus aortae infiltrated with calcareous deposits. Aorta mod. atheromatous.

Head.—Scalp very flabby; skull of a natural thickness, depressed over the lambdoid suture. Dura adheres to the skull along the median line; in the same situation it also adheres to the pia; these latter adhesions are especially marked over the sup parietal and first occipital convolutions, and more on the left than on right.

Meningeal fluid much augmented.

A large spicula of bone found in the dura mater, over the top of the left asc. parietal convolutions.

Pia is not cloudy, nor adherent; it floats on a clear liquid all over the brain.

The brain is fairly well developed, symmetrical, presenting nothing abnormal. The base presents the following: The olfactory nerves are completely atrophied; anterior pair of the corp. quadrigemina very small; a soft, large brownish body, pea like in size, between the left corp. quadrigemina, crus. and pons, it lies superficially to the brain and seems to be connected with the choroid plexus.

Ventricular fluid increased.

Internal carotids athermatous to their very ending in the circus Willisii.

Cerebellum somewhat softened, entire.

All other parts of the central nervous system normal.

Case 20 (No. —) — Dementia, Senilis.

History.— Admitted May, 1895. Duration of mental derangement — case six months.

Causes.— Age, intemperance.

Age, 73; married; quarry-laborer.

Onset gradual; became feeble and filthy, and at times violent and threatening; destructive; excitable and again depressed.

After admission.— Memory poor; weak physically; dry cough. Temperature elevated. June. Pleasant, weak; temperature rises and continues higher. Gradual exhaustion; death June 21st, 1:50 p. m.

Autopsy June 22d, 10 a. m.

General examination.— Body emaciated; abdomen sunken in its upper part, flatulent below. Decubitus over the hips.

Section.— Scalp very thin. Skull thickened to almost twice its normal, very heavy. Dura adheres all over; some sand in the adhesions.

Dura adhered to pia over both sup. parietal convolutions near the median line.

Pia cloudy all over the middle three-fifths of the brain surface,

especially over the asc. parietal, sup. parietal and first occ. convolutions; no adhesions with the brain.

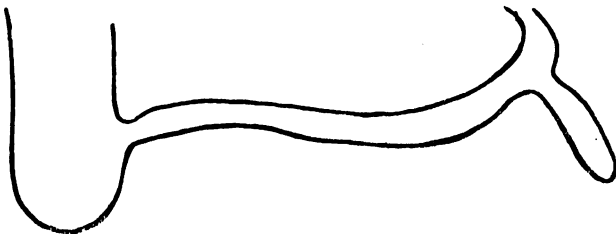
Meningeal fluids augmented.

Brain somewhat darker than normal, very frail. No special pathological condition found in the remaining nervous centers.

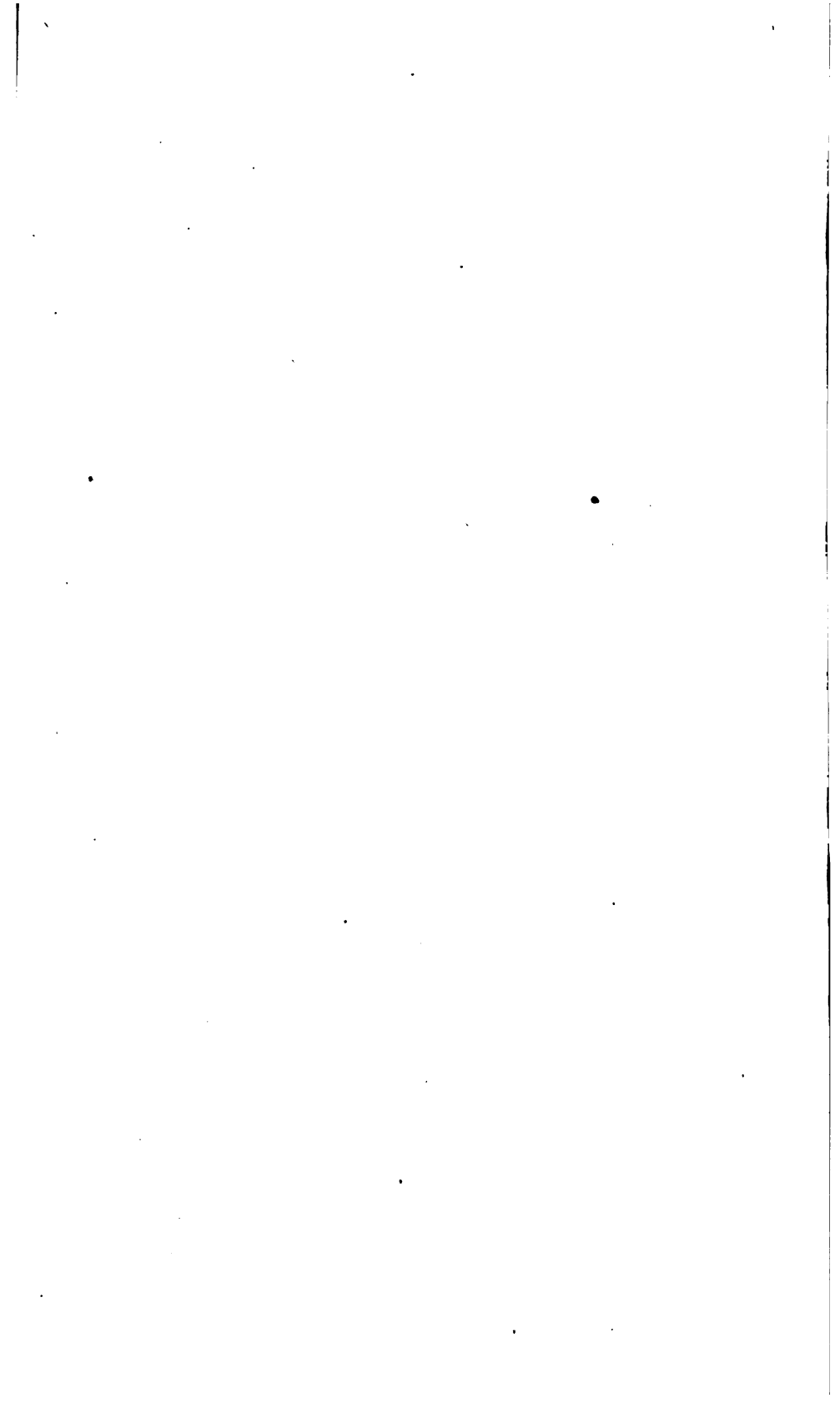
Thoracic organs.—Heart feeble; two semiorganized, not very large clots in the ventricles; valves normal.

Lungs normal, lower lobes congested; left bound by old pleuritic adhesions.

Abdominal organs.—All normal, except the following: On the small intestine, about twenty inches from its junction with the coecum, there is a downwards projecting pouch. It is in direct communication with the intestine, its mouth is but little constricted, and it has the same general aspect and structure as the parts with which communicates. It is four and a half inches long, filled with gas, smooth and free from adhesions.

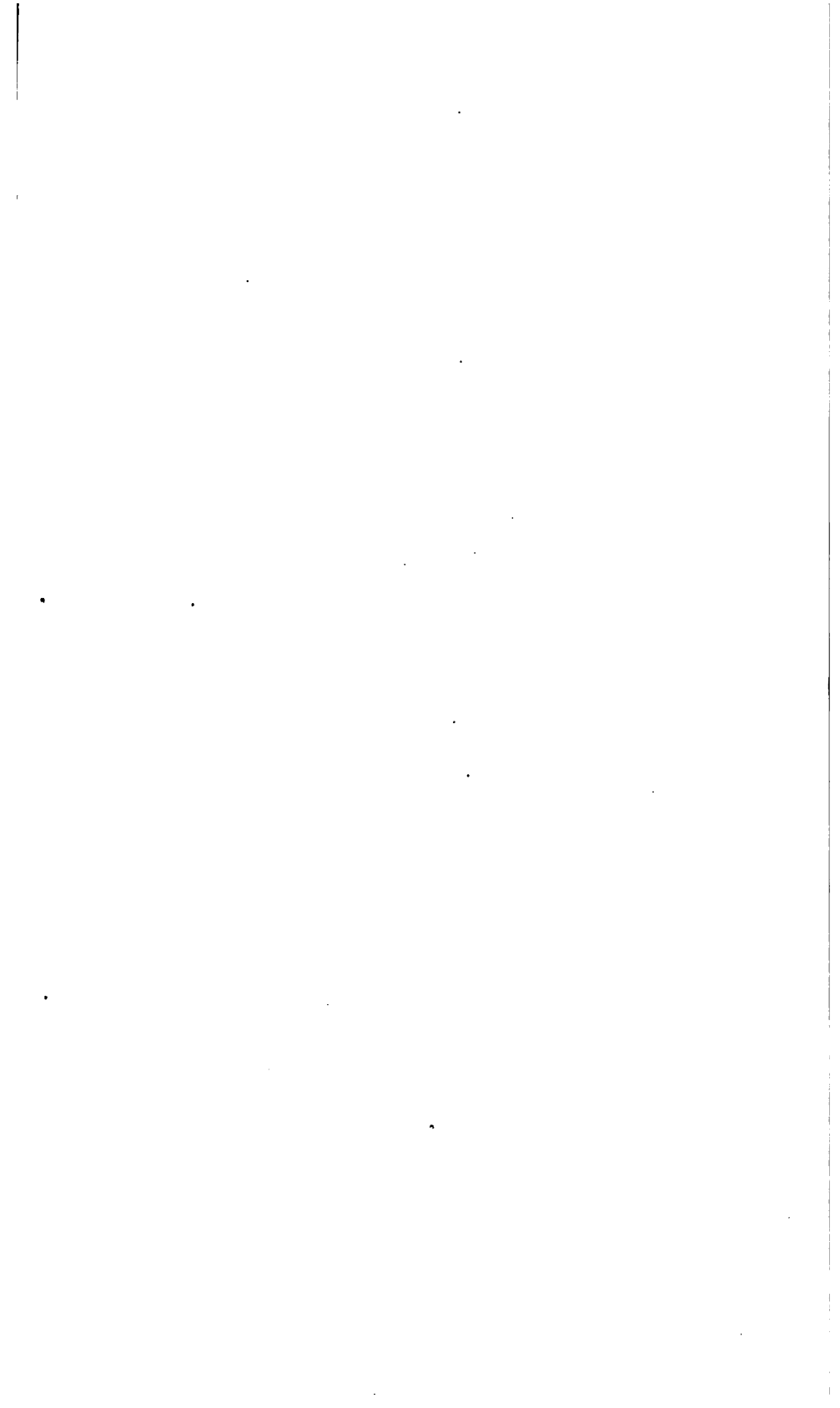


The vermiform appendix is very thin and eight inches long.



(5.)

STATISTICAL TABLES.



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7. Showing the first and subsequent admissions of those admitted during the current year, and since October 1, 1888.

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18. Showing period of residence in hospital of those remaining under treatment September 30, 1895.

19. Showing the occupation of those admitted during the current year, and since October 1, 1888.

20. Showing the nativity of patients admitted during the current year, and since October 1, 1888.

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22. Showing the residence by counties and classification of patients remaining under treatment September 30, 1895.

23. Percentage of recoveries.

24. Form of mental disease of those admitted, and of those discharged, with results of treatment, from May, 1874, to September 30, 1895.

25. General statement of operations of the Middletown State Homeopathic Hospital, from May 1, 1874, to September 30, 1895.

26. Showing percentage of recoveries, also percentage of deaths on the whole number of patients admitted, average daily population, whole number treated, and whole number discharged, since opening of the institution.

27. Number of men employed, kind of work done, and average per cent. of male patients employed.

28. Number of women employed, kind of work done, and average per cent. of female patients employed.

STATISTICAL TABLES.

TABLE No. 1.

Showing movement of population for the year ending September 30, 1895.

	Men.	Women.	Total.
Remaining October 1, 1894.....	520	527	1,047
Admitted during the year ending September 30, 1895.....	146	132	278
Total number under treatment during the year.....	666	659	1,325
Daily average population.....	539 ²² / ₃₆₅	558 ²⁷ / ₃₆₅	1,097 ¹¹² / ₃₆₅
Capacity of institution.....	514	510	1,024
Discharged during the year:			
As recovered.....	48	58	106
As not recovered.....	12	8	20
As not insane.....	1*	1†	2
Died.....	51	31	82
Whole number discharged during the year.....	112	98	210
Remaining October 1, 1895.....	554	561	1,115

TABLE No. 2.

October 1, 1894, to September 30, 1895.

Date of opening, April 20, 1874.	
Total acreage of ground and buildings.....	281
Value of real estate, including buildings.....	\$1,137,646 18
Value of personal property.....	95,500 00
Acreage under cultivation.....	210
Capacity of institution October 1, 1895.....	1,024
Daily average number of patients.....	1,097

*Chronic nephritis. †Idiot.

U of M

Receipts during year.

Balance on hand October 1, 1894.....	\$8,713 87
From State Treasury for maintenance on estimates 1 to 12 inclusive	\$121,688 01
From private patients.....	73,220 67
From reimbursing patients.....	16,534 55
From all other sources.....	1,695 75
Total receipts for maintenance.....	\$213,138 98
From State Comptroller for extraordinary improve- ments under legislative appropriations of 1893 and 1894, including balance on hand October 1, 1894...	\$26,847 66
Received from State Commission in Lunacy for extra- ordinary improvements under Chapter 693, Laws of 1895.....	3,004 20
Surplus of old maintenance fund on hand and due Oc- tober 1, 1895	818 16

Disbursements during year.

Estimate No. 1. For officers' salaries	\$16,991 67
Estimate No. 2. For wages.....	71,397 28
Estimate No. 3. For provisions and stores	80,868 22
Estimate No. 4. For ordinary repairs.....	1,001 18
Estimate No. 5. For farm and grounds.....	3,554 69
Estimate No. 6. For clothing	1,815 01
Estimate No. 7. For furniture and bedding.....	3,238 55
Estimate No. 8. For books and stationery.....	977 65
Estimate No. 9. For fuel and light	23,949 21
Estimate No. 10. For medical supplies.....	2,252 81
Estimate No. 11. For miscellaneous expenses.....	7,041 89
Estimate No. 12. For transportation	1,166 10
Total disbursements during year for maintenance, estimates 1 to 12 inclusive	\$214,254 26
Total disbursements during year for extraordinary im- provements under legislative appropriations of 1893 and 1894.....	\$23,584 96

Total disbursements during year for extraordinary improvements under apportionments by State Commission in Lunacy for extraordinary improvements....	\$1,271 00
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Total disbursements during year for extraordinary improvements from surplus of maintenance fund of 1893.....	\$1,750 00
--	------------

Balances October 1, 1895 :

General maintenance fund.....	\$7,598 59
Apportionments by State Commission in Lunacy, Chapter 693, Laws 1895	1,733 20
Special legislative appropriations, 1893 and 1894..	3,262 70
Surplus maintenance fund of 1893.....	818 16

Weekly <i>per capita</i> cost on daily average number of patients, estimates 1 to 12 inclusive, and exclusive of payments from surplus and other funds.....	\$3 75.6
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Maximum rate of wages paid attendants:

Men	35 00
Women	32 00

Minimum rate of wages paid attendants :

Men	20 00
Women	14 00

Proportion of day attendants to average daily population	1 to 9.21
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Proportion of night attendants to average daily population	1 to 54.85
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Percentage of daily patient population engaged in some kind of useful occupation.....	25.48
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Estimated value of farm and garden products during year	\$8,600 00
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Estimated value of articles made or manufactured by patients during the year	3,275 00
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TABLE No. 3.

Showing assigned causes of insanity in cases admitted during the year ending September 30, 1895, and since October 1, 1888.

CAUSES.	YEAR ENDING SEPTEMBER 30, 1895.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Abuse.....	.....	.....	.....	.....	1	1
Amenorrhoea.....	.....	1	1	.....	2	2
Anæmia.....	.....	1	1	.....	3	3
Apoplexy.....	2	.....	2	4	5	9
Brain fever.....	.....	1	1	.....	1	1
Business trouble.....	2	.....	2	12	8	20
Childbirth.....	.....	3	3	.....	23	23
Chorea.....	.....	.....	.....	.....	2	2
Cigarette smoking.....	1	.....	1	1	1	2
Climaxis.....	.....	9	9	.....	55	55
Death of relatives.....	1	8	9	12	53	65
Death of friends.....	.....	.....	.....	.....	1	1
Debility.....	.....	.....	.....	.....	1	1
Disappointed ambition.....	.....	.....	.....	.....	1	1
Disappointed in love.....	1	5	6	2	21	23
Disappointed in marriage.....	.....	.....	.....	1	.....	1
Domestic trouble.....	.....	4	4	1	29	30
Elopement of daughter.....	.....	.....	.....	.....	1	1
Epilepsy.....	3	2	5	24	21	45
Excitement.....	.....	.....	.....	.....	3	3
Exposure when infant.....	.....	.....	.....	1	.....	1
Fall.....	.....	.....	.....	2	1	3
Fright.....	.....	.....	.....	2	15	17
Ill health.....	.....	1	1	4	7	11
Ill treatment.....	.....	1	1	.....	2	2
Injury to head.....	4	2	6	32	6	38
Infantile paralysis.....	.....	.....	.....	1	.....	1
Insanity of relatives.....	.....	.....	.....	.....	2	2
Insolation.....	5	.....	5	30	2	32
Intemperance.....	25	4	29	199	24	223
Intemperance in the use of drugs.....	.....	1	1	1	2	3
Intemperance in the use of tobacco.....	.....	.....	.....	.....	1	1
Jealousy.....	.....	.....	.....	.....	2	2
Lactation.....	.....	1	1	.....	2	2
La grippe.....	3	6	9	5	16	21
Laparotomy.....	.....	.....	.....	.....	1	1
Loss of sleep.....	.....	.....	.....	.....	1	1
Loss of property.....	.....	.....	.....	1	2	3
Malarial fever.....	.....	.....	.....	.....	1	1
Masturbation.....	17	3	20	139	31	170

TABLE No. 3—*Showing assigned causes of insanity, etc.*—(Conclu'd).

CAUSES.	YEAR ENDING SEPTEMBER 30, 1895.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Meningitis	1	....	1	1	1	2
Menstrual difficulty.....	....	2	2	....	12	12
Miscarriage .....	....	....	....	....	1	1
Mind cure .....	....	....	....	....	1	1
Opium habit.....	2	1	3	8	11	19
Ovariectomy .....	....	....	....	....	2	2
Ovarian disease .....	....	....	....	....	1	1
Overdose of quinine.....	....	....	....	....	1	1
Overstudy .....	....	1	1	3	6	9
Overwork	6	9	15	40	75	115
Paralysis .....	....	....	....	1	....	1
Physical disease.....	7	6	13	62	83	145
Physical injury.....	....	1	1	2	1	3
Post-spinal sclerosis .....	....	....	....	1	....	1
Poverty and want .....	....	....	....	1	2	3
Predisposition .....	....	....	....	1	1	2
Pregnancy.....	....	1	1	....	4	4
Puberty .....	....	....	....	1	....	1
Puerperal state.....	....	1	1	....	20	20
Religious excitement.....	4	3	7	17	18	35
Senility.....	6	5	11	21	29	50
Sexual excess.....	....	1	1	6	3	9
Shock from injury .....	....	1	1	3	1	4
Sickness of relatives.....	....	....	....	....	3	3
Spiritualism .....	....	1	1	....	2	2
Surgical operation. ....	....	1	1	....	3	3
Syphilis.....	2	...	2	6	1	7
Traumatism .....	....	....	....	1	7	8
Typhoid fever.....	....	....	....	....	2	2
Unascertained	21	21	42	145	231	376
Use of hair wash .....	....	1	1	....	2	2
Uterine disease.....	....	2	2	....	3	3
Worry	31	20	51	232	167	449
Not insane.....	2	1	3	6	1	7
Total	146	132	278	1,082	1,045	2,127

TABLE No. 4.

Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1895, and since October 1, 1888.

FORM.	YEAR ENDING SEPTEMBER 30, 1895.			SINCE OCTOBER 1, 1888.		
	Admitted.	Recovered.	Died.	Admitted.	Recovered.	Died.
Mania, acute....	54	34	5	482	293	43
Mania, sub-acute.	35	17	3	275	87	9
Mania, recurrent.	5	3	....	7	5	.. ..
Mania, chronic...	6	2	3	125	9	11
Melancholia, acute.....	91	50	7	639	326	45
Melancholia, sub- acute.....	.....	.....	....	1	.....	.....
Melancholia, chronic	6	.....	4	43	8	20
Alternating (cir- cular) insanity.	.....	.....	....	.....	.....	.....
General paralysis	14	.....	16	104	.....	80
Dementia, pri- mary.....	.....	.....	....	4	3	.....
Dementia, termi- nal.....	56	.....	39	371	1	163
Epilepsy.....	4	.....	3	46	.....	11
Imbecility	4	.....	....	22	.....	4
Idiocy .....	.....	.....	1	1	.....	1
Not insane*.....	3	.....	1	7	.....	2

TABLE No. 5.

Showing the number and percentage of recoveries and deaths, based upon the daily average population since October 1, 1888.

YEAR.	Average daily population.	Recoveries.	Percentage.	Deaths.	Percentage.
1889.....	536 ⁶⁵ ₃₆₅	101	18.84	15	2.79
1890.....	578 ⁸⁵ ₃₆₅	105	18.16	30	5.19
1891.....	709 ¹¹⁵ ₃₆₅	113	15.93	43	6.06
1892.....	827 ¹⁰³ ₃₆₅	125	15.11	67	8.10
1893.....	975 ⁸¹ ₃₆₅	107	10.96	79	8.09
1894.....	1,020 ³⁹ ₃₆₅	80	7.84	73	7.15
1895.....	1,097 ¹¹⁹ ₃₆₅	106	9.66	82	7.47

*Includes cases of alcoholism, opium habit, etc.

TABLE No. 6.

Showing the cause of death of patients who died during the current year and since October 1, 1888.

CAUSE OF DEATH.	DURING THE YEAR.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Alcoholism	1	....	1	1	....	1
Anascara and paralysis of heart.....	1	....	1	1	....	1
Ante-mortem heart clot...	....	....	....	1	....	1
Anthrax.....	....	....	....	1	....	1
Aortic insufficiency.....	....	....	....	1	....	1
Apoplexy	6	9	15	24	20	44
Appendicitis .....	....	....	....	....	1	1
Asphyxia.....	....	....	....	....	1	1
Bronchitis	2	....	2	2	2	4
Cancer of liver.....	1	....	1	1	....	1
Carcinoma .....	....	....	....	1	1	2
Cardiac disease.....	....	1	1	2	8	10
Cystitis .....	....	....	....	3	....	3
Delirium tremens.....	1	....	1	3	1	4
Diabetes.....	....	....	....	1	2	3
Diarrhoea .....	....	2	2	....	4	4
Enterocolitis.....	....	....	....	....	1	1
Epilepsy .....	....	....	....	1	1	2
Epistaxis.....	....	1	1	....	1	1
Exhaustion from:						
Mania, acute.....	2	....	2	11	9	20
Mania, acute delirious..	....	....	....	3	4	7
Mania, sub-acute.....	....	....	....	1	....	1
Mania, chronic.....	1	....	1	5	1	6
Melancholia, acute.....	2	....	2	14	8	22
Melancholia, acute del..	....	....	....	....	1	1
Melancholia, chronic...	2	....	2	12	....	12
Dementia, terminal.....	17	4	21	80	35	115
General paresis.....	11	2	13	63	6	69
Epilepsy.....	1	2	3	4	4	8
Fistulae .....	....	....	....	....	1	1
Intestinal hemorrhage ...	....	1	1	....	1	1
Intussusception .....	....	....	....	....	1	1
Multiple neuritis .....	....	....	....	....	1	1
Meningitis, acute.....	....	1	1	1	1	2
Nephritis .....	....	....	....	....	2	2
Paralysis of par vagum ..	....	....	....	....	1	1
Phthisis .....	....	3	3	5	9	14
Pneumonia .....	....	....	....	....	3	3
Pulmonary cedema.....	....	2	2	....	2	2
Pyæmia .....	....	....	....	....	1	1
Rupture of heart	2	1	3	2	1	3
Sarcoma.....	....	....	....	1	....	1

TABLE No. 6.—(Concluded)

CAUSE OF DEATH.	DURING THE YEAR.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Scirrhus of uterus .....	....	1	1	....	1	1
Suicide.....	1	....	1	3	1	4
Traumatism.....	....	....	....	1	....	1
Typhloenteritis.....	....	....	....	....	1	1
Tuberculosis .....	....	1	1	....	1	1
Ulceration of rectum.....	....	....	....	....	1	1
Total	51	31	82	249	140	389

TABLE NO. 7.

Showing the first and subsequent admissions of patients admitted during the current year and since October 1, 1888.

NUMBER OF ADMISSIONS.	YEAR ENDING SEPTEMBER 30, 1885.						SINCE OCTOBER 1, 1888.					
	CASES ADMITTED.			TIMES PREVIOUSLY DISCHARGED RECOVERED.			CASES ADMITTED.			TIMES PREVIOUSLY DISCHARGED RECOVERED.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
First.....	126	102	228	10	14	24	989	901	1,890	56	71	127
Second.....	14	23	37	1	5	6	65	111	176	17	17	34
Third.....	4	7	11	....	....	....	20	23	43	7	9	16
Fourth or more.....	2	....	2	1	....	1	8	10	18	1	2	3
Total cases.....	146	132	278	12	19	31	1,082	1,045	2,127	81	99	180
Total persons.....	126	102	228	....	....	....	989	901	1,890	....	....	....

TABLE No. 8.

Showing hereditary tendency to insanity in patients admitted during the current year and since October 1, 1888.

	YEAR ENDING SEPTEMBER 30, 1895.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Paternal branch.....	12	13	25	96	103	193
Maternal branch.....	23	13	36	113	126	239
Paternal and maternal branches.....	1	....	1	15	16	31
Collateral branches.....	10	16	26	74	107	181
No hereditary tendency...	88	89	177	716	606	1322
Unascertained.....	12	1	13	74	87	161
Total	146	132	278	1,082	1,045	2,127

TABLE No. 9.

Showing civil condition of patients admitted during the current year and since October 1, 1888.

CIVIL CONDITIONS.	YEAR ENDING SEPTEMBER 30, 1895.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Single	74	52	126	523	384	907
Married	56	55	111	474	506	980
Widowed.....	16	25	41	75	145	220
Divorced .....	....	....	....	2	6	8
Unascertained.....	....	....	....	8	4	12
Total	146	132	278	1,082	1,045	2,127

TABLE No. 10.

Showing degree of education of patients admitted during the current year and since October 1, 1888.

DEGREE OF EDUCATION.	YEAR ENDING SEPTEMBER 30, 1895.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Collegiate	3	....	3	51	16	67
Academic.....	13	17	30	108	147	255
Common school.....	119	99	218	768	739	1,507
Read and write.....	....	....	....	25	22	47
Read only	1	3	4	25	21	46
No education.....	2	1	3	50	51	101
Unascertained.....	8	12	20	55	49	104
Total.....	146	132	278	1,082	1,045	2,127

TABLE NO. 11

Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year and since October 1, 1888.

	YEAR ENDING SEPTEMBER 30, 1895.						SINCE OCTOBER 1, 1888.					
	DURATION PREVIOUS TO ADMISSION.			PERIOD UNDER TREATMENT.			DURATION PREVIOUS TO ADMISSION.			PERIOD UNDER TREATMENT.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
Under one month	12	19	31	....	....	....	80	113	193	6	2	8
One to three months	10	11	21	6	5	11	75	103	178	32	41	73
Three to six months	8	5	13	12	20	32	54	54	108	85	118	203
Six to nine months	2	12	14	9	17	26	35	44	79	64	83	147
Nine to twelve months	2	....	2	7	4	11	7	13	20	50	44	94
One year to eighteen months.	1	6	7	6	6	12	24	35	59	37	54	91
Eighteen months to two years.	....	....	....	4	2	6	3	4	7	26	23	49
Two to three years	4	1	5	1	1	2	13	10	23	9	22	31
Three to four years	1	....	1	2	2	4	8	5	13	7	13	20
Four to five years .....	....	....	....	....	....	....	1	3	4	2	2	4
Five to ten years	3	2	5	1	....	1	7	12	19	3	10	13
Ten to twenty .....	....	....	....	....	1	1	2	3	5	1	3	4
Not insane .....	....	....	....	....	....	....	....	....	....	....	....	....
Unascertained	5	2	7	....	....	....	13	16	29	....	....	....
Total	48	58	106	48	58	106	322	415	737	322	415	737

TABLE No. 13.

Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888.

	YEAR ENDING SEPTEMBER 30, 1895.						SINCE OCTOBER 1, 1888.					
	DURATION PREVIOUS TO ADMISSION.			PERIOD UNDER TREATMENT.			DURATION PREVIOUS TO ADMISSION.			PERIOD UNDER TREATMENT.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
Under one month.....	7	4	11	8	4	12	25	22	47	42	30	72
One to three months.	3	4	7	9	3	12	18	23	41	26	17	43
Three to six months.....	3	3	6	3	3	6	24	9	33	23	7	30
Six to nine months.....	4	2	6	4	....	4	20	9	29	17	4	21
Nine months to one year.....	1	1	2	1	2	3	10	5	15	12	11	23
One year to eighteen months..	3	3	6	1	....	1	26	12	38	21	12	33
Eighteen months to two years	2	....	2	2	3	5	10	7	17	26	12	38
Two to three years.....	8	1	9	8	9	17	31	9	40	25	19	44
Three to four years.....	3	2	5	4	3	7	13	9	22	15	5	20
Four to six years.....	7	2	9	7	2	9	18	5	23	23	9	32
Six to ten years.....	1	4	5	2	2	4	16	9	25	12	13	25
Ten to twenty years.....	4	....	4	2	....	2	12	4	16	7	1	8
Twenty years and over.....	2	4	6	....	....	....	6	11	17	....	....	....
Not insane	1	....	1	....	....	....	2	....	2	....	....	....
Unascertained.....	2	1	3	....	....	....	18	6	24	....	....	....
Total.....	51	31	82	51	31	82	249	140	389	249	140	389

TABLE No. 14.

Showing the ages of those admitted during the current year and since October 1, 1888.

AGE.	YEAR ENDING SEPTEMBER 30, 1895.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
From 5 to 10 years.....	....	....	....	....	2	2
From 10 to 15 years.....	1	1	2	5	6	11
From 15 to 20 years.....	8	10	18	44	33	77
From 20 to 25 years.....	19	8	27	106	81	187
From 25 to 30 years.....	15	12	27	119	117	236
From 30 to 35 years.....	12	16	28	139	134	273
From 35 to 40 years.....	16	14	30	146	122	268
From 40 to 50 years.....	24	28	52	218	261	479
From 50 to 60 years.....	19	17	36	134	141	275
From 60 to 70 years.....	16	15	31	105	87	192
From 70 to 80 years.....	10	6	16	48	47	95
From 80 to 90 years.....	6	4	10	16	11	27
Unascertained .....	....	1	1	2	3	5
Total	146	132	278	1,082	1,045	2,127

TABLE No. 15.

Showing the ages of those discharged recovered during the current year and since October 1, 1888.

AGE.	YEAR ENDING SEPTEMBER 30, 1895.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
From 10 to 20 years.....	4	5	9	19	27	46
From 20 to 30 years.....	18	14	32	74	97	171
From 30 to 40 years.....	5	14	19	85	113	198
From 40 to 50 years.....	7	17	24	77	101	178
From 50 to 60 years.....	8	6	14	37	49	86
From 60 to 70 years.....	4	2	6	21	26	47
From 70 to 80 years.....	2	....	2	9	2	11
Total	48	58	106	322	415	737

TABLE NO. 16.

Showing the ages of patients who died during the current year and since October 1, 1888.

AGE.	YEAR ENDING SEPTEMBER 30, 1895.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
From 10 to 15 years.....	....	1	1	....	2	2
From 15 to 20 years.....	....	1	1	1	1	2
From 20 to 25 years.....	1	1	2	8	3	11
From 25 to 30 years.....	3	....	3	16	7	23
From 30 to 35 years.....	4	2	6	23	7	30
From 35 to 40 years.....	5	1	6	30	6	36
From 40 to 50 years.....	8	9	17	49	40	89
From 50 to 60 years.....	7	2	9	43	22	65
From 60 to 70 years.....	8	7	15	37	23	60
From 70 to 80 years.....	10	6	16	32	26	58
From 80 to 90 years.....	5	1	6	9	3	12
Over 90 years .....	....	....	....	1	....	1
Total	51	31	82	249	140	389

TABLE NO. 17.

Alleged duration of insanity previous to admission of patients admitted during the year ending September 30, 1895.

DURATION OF INSANITY..	Men.	Women.	Total.
Under one month.....	34	36	70
One to three months	15	25	40
Three to six months.....	12	5	17
Six to nine months.....	12	13	25
Nine months to one year.....	3	3	6
One year to eighteen months.....	8	12	20
Eighteen months to two years.....	2	1	3
Two to three years.....	12	6	18
Three to four years	5	6	11
Four to five years.....	3	2	5
Five to ten years	15	8	23
Ten to fifteen years	4	2	6
Fifteen to twenty years.....	....	....	....
Twenty to thirty years	2	2	4
Thirty years and upward.....	....	....	....
Not insane.....	2	1	3
Unascertained.....	17	10	27
Total.....	146	132	278

TABLE No. 18.

Showing period of residence in asylum of patients remaining under treatment
September 30, 1895.

PERIOD OF RESIDENCE.	Men.	Women.	Total.
Under one month.....	16	10	26
One to three months.....	24	14	38
Three to six months.....	25	25	50
Six to nine months.....	19	19	38
Nine months to one year.....	14	24	38
One year to eighteen months.....	43	34	77
Eighteen months to two years.....	36	25	61
Two to three years.....	73	100	173
Three to four years.....	58	72	130
Four to five years.....	66	75	141
Five to ten years.....	129	108	237
Ten to fifteen years.....	46	39	85
Fifteen to twenty years.....	4	14	18
Twenty to thirty years.....	1	2	3
Thirty years and upward.....	.....	.....	.....
Not insane*.....	.....	.....	.....
Total.....	554	561	1,115

TABLE No. 19.

Showing the occupation of those admitted during the current year and since
October 1, 1888.

OCCUPATION.	YEAR ENDING SEPTEMBER 30, 1895.			SINCE OCTOBER 1, 1888.		
	Men.	Women.	Total.	Men.	Women.	Total.
Professional:						
Clergy, military and naval officers, physicians, law- yers, architects, artists, authors, civil engineers, surveyors, etc.....	5	....	5	70	3	73
Commercial:						
Bankers, merchants, ac- countants, clerks, sales- men, shopkeepers, shop- men, stenographers, type- writers, etc.....	34	....	34	208	....	208

* Includes cases of alcoholism, morphia habit, etc.

TABLE NO. 19 —(Concluded).

OCCUPATION.	YEAR ENDING SEPTEMBER 30, 1893.			SINCE OCTOBER 1, 1888.		
	Men.	Women	Total.	Men.	Women.	Total.
Agricultural and pas- toral:						
Farmers, gardeners, herds- men, etc.	23	....	23	158	....	158
Mechanics at out-door vocations:						
Blacksmiths, carpenters, engine-fitters, sawyers, painters, police, etc....	11	....	11	74	....	74
Mechanics, etc., at sedentary vocations:						
Bootmakers, bookbinders, compositors, weavers, tailors, bakers, etc....	20	....	20	154	....	154
Domestic service:						
Waiters, cooks, servants, etc.	5	15	20	26	93	119
Educational and higher domestic duties:						
Governesses, teachers, stu- dents, house keepers, nurses, etc.	2	82	84	20	683	703
Commercial:						
Shopkeepers, saleswomen, stenographers, type- writers, etc. ....	....	2	2	....	13	13
Employed in sedentary occupation:						
Tailoresses, seamstresses, bookbinders, factory workers, etc. ....	....	3	3	....	40	40
Miners, seamen, etc. ....	....	....	....	....	....	....
Prostitutes ....	....	....	....	....	....	....
Laborers	28	....	28	251	....	251
No occupation	18	30	48	115	203	318
Unascertained ....	....	....	....	6	10	16
Total	146	132	278	1,082	1,045	2,127

TABLE No. 20.

Showing the nativity of patients admitted during the current year and since October 1, 1888.

NATIVITY.	YEAR ENDING SEPTEMBER 30, 1893.			SINCE OCTOBER 1, 1888.		
	Men.	Women	Total.	Men.	Women.	Total.
United States	110	112	222	830	822	1,652
England	9	3	12	34	22	56
Ireland	10	9	19	99	105	204
Germany	11	4	15	66	54	120
France.....	....	1	1	4	6	10
Scotland.....	....	....	....	5	8	13
Canada	2	....	2	7	4	11
Switzerland.....	....	1	1	5	3	8
Italy. . . . .	....	1	1	2	3	5
Bavaria.....	....	....	....	3	....	3
Prussia . . . . .	....	1	1	3	2	5
Bohemia.....	....	....	....	....	4	4
Sweden.....	2	....	2	6	5	11
Saxony .....	....	....	....	1	....	1
Poland .....	....	....	....	4	1	5
Austria .....	....	....	....	1	1	2
Russia .....	....	....	....	1	....	1
China .....	....	....	....	1	....	1
Japan .....	....	....	....	1	....	1
Isle of Man.....	....	....	....	....	1	1
New Brunswick .....	....	....	....	....	1	1
Hungary .....	....	....	....	....	2	2
India.....	....	....	....	2	....	2
Australia.....	....	....	....	1	....	1
Holland.....	1	....	1	1	....	1
Cuba	1	....	1	1	....	1
Unascertained.....	....	....	....	4	1	5
Total.....	146	132	278	1,082	1,045	2,127

Of the total number admitted since the 1st of October, 1888, the parents of 31.10 per cent. were of foreign birth. In 1.05 per cent. the parentage on the paternal side was foreign, while that on the maternal side was native. In 0.9 per cent. the parentage on the maternal side was foreign, while that on the paternal was native.

TABLE No. 21.

Showing residence by counties and classification of patients admitted during the year ending September 30, 1895.

COUNTIES.	Public.	Private.	Total.
Albany	2	1	3
Broome .....	.....	1	1
Chenango .....	.....	1	1
Delaware	2	3	5
Dutchess	1	.....	1
Erie .....	.....	1	1
Genesee .....	.....	1	1
Kings	2	15	17
Madison	1	.....	1
Monroe .....	.....	2	2
New York	5	28	33
Onondaga	4	2	6
Oneida .....	.....	1	1
Ontario .....	.....	1	1
Orange	83	8	91
Oswego	1	.....	1
Queens .....	.....	2	2
Rensselaer .....	.....	1	1
Richmond	1	.....	1
Rockland	21	1	22
Saratoga	1	1	2
Schenectady .....	.....	1	1
Suffolk	11	2	13
Sullivan	20	.....	20
Tioga	1	.....	1
Ulster	42	.....	42
Warren	1	.....	1
Washington .....	.....	1	1
Wayne .....	.....	1	1
Westchester	1	1	2
Wyoming	1	1	2
Total	201	77	278

TABLE No. 22.

Showing the residence by counties and classification of patients remaining under treatment September 30, 1895.

COUNTIES.	PUBLIC.			PRIVATE.		
	Men.	Women.	Total.	Men.	Women.	Total.
Albany	7	7	14	3	3	6
Broome	1	1	2	1	....	1
Cayuga	2	1	3	....	....	....
Chautauqua	1	....	1	....	....	....
Chemung	3	1	4	1	....	1
Chenango	1	2	3	....	1	1
Columbia .....	....	1	1	....	....	....
Delaware .....	....	13	13	1	1	2
Dutchess	2	....	2	....	1	1
Fulton .....	....	....	....	1	....	1
Genesee .....	....	....	....	....	1	1
Greene .....	....	1	1	....	1	1
Kings	11	10	21	23	23	46
Madison	2	2	4	....	1	1
Monroe	2	3	5	1	3	4
New York	13	15	28	54	55	109
Oneida	1	....	1	....	2	2
Onondaga	14	1	15	1	6	7
Ontario	2	....	2	....	1	1
Orange	129	112	241	23	20	43
Oswego	1	1	2	....	....	....
Otsego .....	....	....	....	....	1	1
Queens	33	21	54	5	2	7
Rensselaer .....	....	1	1	5	....	5
Richmond	14	17	31	3	....	3
Rockland	33	33	66	1	....	1
St. Lawrence .....	....	....	....	....	1	1
Saratoga	5	9	14	....	1	1
Schenectady .....	....	....	....	1	1	2
Schoharie	1	....	1	....	....	....
Steuben .....	....	....	....	....	1	1
Suffolk	43	53	96	1	4	5
Sullivan	39	43	82	....	....	....
Tioga	2	1	3	....	2	2
Tompkins .....	....	....	....	....	1	1
Ulster	54	58	112	1	2	3
Warren	1	2	3	....	....	....
Washington .....	....	....	....	1	....	1
Wayne .....	....	....	....	1	....	1
Westchester	5	12	17	2	3	5
Wyoming	1	1	2	1	1	2
Total	423	422	845	131	139	270

TABLE No. 23.

Percentage of Recoveries.

YEAR.	Number of insane admitted.	Number discharged recovered.	Percentage.	Number admitted insane five years and over.	Number discharged recovered of those insane five years and over.	Percentage.	Number admitted insane between two and five years.	Number discharged recovered of those insane between two and five years.	Percentage.	Number admitted insane between one and two years.	Number discharged recovered of those insane between one and two years.	Percentage.	Number admitted insane between six months and one year.	Number discharged recovered of those insane between six months and one year.	Percentage.	Number admitted insane less than six months.	Number discharged recovered of those insane less than six months.	Percentage.
1874.....	69	7	10.14	0	1	11.11	6	1	16.66	10	8	25.00	15	3	20.00	29	9	31.03
1875.....	94	30	31.91	12	1	8.33	26	3	8.00	8	9	40.00	13	9	69.23	40	37	92.50
1876.....	113	46	40.70	5	1	4.54	15	3	20.00	10	14	14.29	9	9	100.00	74	37	50.00
1877.....	143	48	33.59	23	3	12.93	23	5	21.74	14	16	28.57	18	16	88.89	69	39	56.52
1878.....	135	61	45.19	3	3	12.00	18	4	22.22	19	16	84.21	16	8	50.00	73	40	54.79
1879.....	167	48	28.74	11	3	18.75	17	4	23.53	18	16	88.89	25	14	56.00	67	38	56.56
1880.....	147	61	41.49	16	3	18.75	20	3	15.00	21	16	76.19	17	17	100.00	79	47	59.49
1881.....	159	69	43.39	13	2	9.52	20	3	15.00	10	14	57.14	17	17	100.00	90	47	52.22
1882.....	174	69	39.65	16	3	18.75	26	6	23.08	26	14	53.85	28	18	64.29	82	55	67.07
1883.....	170	69	40.59	16	3	18.75	26	6	23.08	26	14	53.85	28	18	64.29	85	55	64.71
1884.....	163	63	38.65	17	3	17.65	27	6	22.22	18	13	72.22	16	8	50.00	91	50	54.94
1885.....	203	66	32.51	17	3	17.65	30	6	20.00	18	16	88.89	16	8	50.00	101	50	49.50
1886.....	213	66	31.41	17	3	17.65	30	6	20.00	18	16	88.89	16	8	50.00	101	50	49.50
1887.....	321	96	29.91	23	1	4.35	36	4	11.11	36	9	25.00	30	11	36.66	146	54	36.98
1888.....	321	96	29.91	23	1	4.35	36	4	11.11	36	9	25.00	30	11	36.66	146	54	36.98
1889.....	317	100	31.54	27	1	3.70	36	4	11.11	36	9	25.00	30	11	36.66	146	54	36.98
1890.....	350	101	28.86	30	1	3.33	31	4	12.90	31	13	41.94	39	15	38.46	107	69	64.48
1891.....	386	105	27.20	30	4	13.33	33	7	21.21	40	14	35.00	39	15	38.46	107	69	64.48
1892.....	355	113	31.86	35	7	19.99	33	3	9.09	39	16	40.99	42	20	47.62	169	75	44.38
1893.....	388	125	32.22	35	5	14.29	41	6	14.63	30	20	66.67	43	24	55.81	186	81	43.55
1894.....	343	107	31.17	37	3	8.11	46	10	21.74	32	24	75.00	34	24	70.59	119	37	31.09
1895.....	273	80	29.41	30	3	10.00	31	7	22.58	23	23	100.00	33	33	100.00	122	20	16.39
1896.....	275	106	38.55	33	5	15.15	34	6	17.64	23	23	100.00	31	16	51.61	137	65	47.45
Total.....	4,511	1,645	36.45	602	48	7.97	603	102	15.36	513	154	30.02	557	245	43.98	2,147	1,075	50.06

NOTE.—Admitted as "not insane" since opening, 18; whole number admitted, 4,394. See Table No. 25.

TABLE No. 24.

Form of mental disease of those admitted, and of those discharged, with results of treatment, from May, 1874, to September 30, 1895.

FORM.	NUMBER OF INSANE ADMITTED.			DISCHARGED RECOVERED.			DISCHARGED IMPROVED.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
Mania, acute.....	412	472	884	277	321	598	27	22	49
Mania, acute delirious.....	10	19	29	.....	3	3	.....	.....	.....
Mania, subacute.....	303	231	534	134	108	242	37	35	72
Mania, recurrent.....	.....	6	6	.....	5	5	.....	.....	.....
Mania, chronic.....	151	224	375	1	14	15	27	30	57
Melancholia, acute.....	500	671	1,171	277	376	653	49	56	105
Melancholia, acute delirious.....	2	3	5	.....	.....	.....	.....	.....	.....
Melancholia, subacute.....	7	3	10	.....	.....	.....	.....	.....	.....
Melancholia, with stupor.....	15	22	37	7	12	19	3	4	7
Melancholia, chronic.....	56	89	145	6	4	10	16	31	47
Dementia, acute primary.....	30	11	41	25	10	35	4	.....	4
Dementia, alcoholic.....	75	10	85	43	8	51	2	2	4
Dementia, masturbatic.....	38	13	51	5	7	12	2	1	3
Dementia, terminal.....	393	315	708	.....	.....	.....	39	27	66
General paresis.....	204	26	230	.....	.....	.....	24	3	27
Epileptic insanity.....	79	48	127	1	1	2	11	4	15
Imbecility.....	16	6	22	.....	.....	.....	1	.....	1
Idiocy.....	.....	1	1	.....	.....	.....	.....	.....	.....
Total.....	2,291	2,220	4,511	776	869	1,645	242	215	457

TABLE No. 24—(Concluded).

FORM.	DISCHARGED UNIMPROVED.			DISCHARGED DEAD.		
	Men.	Women.	Total.	Men.	Women.	Total.
Mania, acute.....	10	14	24	22	42	64
Mania, acute delirious.....	.....	.....	.....	13	11	24
Mania, subacute.....	26	29	55	5	8	13
Mania, recurrent.....	.....	.....	.....	.....	.....	.....
Mania, chronic.....	62	85	147	14	9	23
Melancholia, acute.....	10	29	39	39	41	80
Melancholia, acute delirious.....	.....	.....	.....	2	1	3
Melancholia, subacute.....	.....	.....	.....	.....	.....	.....
Melancholia, with stupor.....	5	3	8	.....	6	6
Melancholia, chronic.....	26	38	64	20	12	32
Dementia, acute primary.....	.....	2	2	.....	.....	.....
Dementia, alcoholic.....	1	1	2	1	.....	1
Dementia, masturbatic.....	5	1	6	.....	.....	.....
Dementia, terminal.....	92	116	208	141	79	220
General paresis.....	37	2	39	142	13	155
Epileptic insanity.....	20	18	38	11	11	22
Imbecility.....	2	2	4	3	1	4
Idiocy.....	.....	.....	.....	.....	1	1
Total.....	296	340	636	413	235	648

TABLE No. 25.
General Statement of Operations of the Middletown State Homeopathic Hospital, from May 1, 1874, to September 30, 1895.

YEAR.	WHOLE NUMBER ADMITTED.			NUMBER DISCHARGED.			NUMBER TREATED.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
1874	27	42	69	7	7	14	27	42	69
1875	49	50	99	38	34	72	69	85	154
1876	53	60	113	55	55	110	82	113	195
1877	76	67	143	44	56	100	105	123	228
1878	71	85	156	65	73	138	132	152	284
1879	67	70	137	68	61	119	135	148	283
1880	76	71	147	73	58	131	153	158	311
1881	93	67	160	65	59	124	173	167	340
1882	82	93	175	77	74	151	190	201	391
1883	101	69	170	77	73	150	214	196	410
1884	86	77	163	85	56	141	222	201	423
1885	109	95	204	72	59	131	246	240	486
1886	101	112	213	82	75	157	275	293	568
1887	117	114	231	94	93	187	310	332	642
1888	111	106	217	98	115	213	327	345	672
1889	146	104	250	101	94	195	375	334	709
1890	149	139	288	101	95	196	423	379	802
1891	176	179	355	105	91	196	498	463	961
1892	157	182	339	115	135	250	550	554	1,104
1893	163	180	343	112	107	219	598	599	1,197
1894	145	129	274	111	94	205	631	621	1,252
1895	146	132	278	112	98	210	666	659	1,325
Total	2,301	2,223	4,524	1,747	1,662	3,409	.....	.....	.....

TABLE No. 25.—(Continued).

YEAR.	NUMBER DISCHARGED RECOVERED.			NUMBER DISCHARGED IMPROVED.			NUMBER DISCHARGED UNIMPROVED.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
1874	5	2	7	.....	3	3	.....	.....	.....
1875	15	15	30	5	10	15	9	6	15
1876	26	20	46	7	4	11	13	24	37
1877	21	25	46	10	11	21	7	11	18
1878	26	35	61	7	9	16	18	25	43
1879	20	28	48	12	8	20	13	22	35
1880	34	27	61	12	12	24	20	13	33
1881	31	30	61	11	7	18	12	18	30
1882	36	33	69	6	7	13	22	26	48
1883	41	28	69	9	19	28	15	19	34
1884	38	30	68	9	5	14	23	14	37
1885	37	29	66	5	6	11	12	14	26
1886	41	39	80	10	3	13	21	26	47
1887	43	53	96	12	11	23	24	22	46
1888	40	60	100	13	18	31	22	24	46
1889	42	59	101	20	8	28	23	26	49
1890	56	49	105	16	22	38	11	12	23
1891	55	58	113	19	12	31	3	6	9
1892	43	82	125	18	14	32	15	9	24
1893	48	59	107	10	8	28	4	10	14
1894	30	50	80	22	14	36	5	9	14
1895	48	58	106	8	4	12	3	3	6
Total	776	869	1,645	241	215	456	295	389	684

TABLE No. 25 — (Concluded).

YEAR.	NUMBER DISCHARGED DEAD.			NUMBER DISCHARGED ELOPED.			NUMBER DISCHARGED NOT INSANE.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
1874	2	2	4	.....	.....	.....	.....	.....	.....
1875	8	3	11	.....	.....	.....	1	.....	1
1876	6	8	14	.....	.....	2	.....	.....	.....
1877	5	9	14	.....	.....	.....	1	.....	1
1878	11	4	15	.....	.....	2	.....	.....	.....
1879	12	3	15	.....	.....	1	.....	.....	.....
1880	7	6	13	.....	.....	.....	.....	.....	.....
1881	11	4	15	.....	.....	.....	.....	.....	.....
1882	13	*7	20	.....	.....	.....	.....	1	.....
1883	12	6	18	.....	.....	1	.....	.....	.....
1884	14	7	21	.....	.....	1	.....	.....	.....
1885	17	10	27	.....	.....	.....	1	.....	1
1886	10	7	17	.....	.....	.....	.....	.....	.....
1887	15	7	22	.....	.....	.....	.....	.....	.....
1888	23	13	36	.....	.....	.....	.....	.....	.....
1889	14	1	15	.....	2	2	.....	.....	.....
1890	18	12	30	.....	.....	.....	.....	.....	.....
1891	28	15	43	.....	.....	.....	.....	.....	.....
1892	37	30	67	.....	.....	1	1	.....	1
1893	49	30	79	.....	.....	.....	1	.....	1
1894	*52	21	73	.....	.....	1	1	.....	1
1895	*51	31	82	.....	.....	.....	1	1	2
Total	415	236	651	11	.....	11	8	2	10

* Include three admitted "not insane" and discharged dead.

TABLE NO. 26.

Showing percentage of recoveries, also percentage of deaths on the whole number of patients admitted, average daily population, whole number treated, and whole number discharged since the opening of the institution.

YEAR.	Number patients admitted.	Recovered.	Percentage.	Average daily population.	Recovered.	Percentage.	Whole number treated.	Recovered.	Percentage.	Whole number discharged.	Recovered.	Percentage.
1874.....	69	7	10.14	31	7	22.58	69	7	10.14	14	7	50.00
1875.....	99	30	30.61	62	30	48.38	154	30	18.48	72	30	41.66
1876.....	113	46	40.70	85	46	54.12	195	46	23.58	110	46	41.81
1877.....	143	46	32.39	110	46	41.82	228	46	20.17	100	46	46.00
1878.....	156	61	39.35	132	61	46.21	284	61	21.44	138	61	44.20
1879.....	137	48	35.03	166	48	28.91	283	48	16.96	119	48	40.33
1880.....	147	61	41.50	186	61	32.70	311	61	19.61	131	61	46.56
1881.....	160	61	38.36	213	61	28.64	340	61	17.94	124	61	49.11
1882.....	175	69	39.65	237	69	29.11	391	69	17.67	151	69	45.69
1883.....	170	69	40.59	265	69	26.03	410	69	16.82	150	69	46.00
1884.....	163	68	41.71	289	68	23.52	423	68	16.07	141	68	48.22
1885.....	204	66	32.51	329	66	20.06	486	66	13.58	131	66	50.38
1886.....	213	80	37.56	410	80	19.51	568	80	14.08	157	80	50.95
1887.....	231	96	41.56	467	96	20.55	642	96	14.98	187	96	51.33
1888.....	217	100	46.08	506	160	19.76	672	100	14.88	213	100	46.94
1889.....	250	101	40.40	536	101	18.84	709	101	14.24	195	101	51.79
1890.....	288	105	36.46	578	105	18.16	802	105	11.84	196	105	53.57
1891.....	355	113	31.83	709	113	15.93	961	113	11.75	196	113	57.65
1892.....	339	125	34.02	827	125	15.11	1104	125	11.32	250	125	50.00
1893.....	343	107	31.28	976	107	10.96	1197	107	8.95	219	107	48.86
1894.....	274	80	29.19	1021	80	7.84	1252	80	6.39	205	80	39.02
1895.....	278	106	38.12	1097	106	9.66	1325	106	8.00	210	106	50.47

TABLE No. 26.—(Concluded).

YEAR.	Number of patients admitted.	Deaths.	Percentage.	Average daily population.	Deaths.	Percentage.	Whole number treated.	Deaths.	Percentage.	Whole number discharged.	Deaths.	Percentage.
1874.....	69	4	5.65	31	4	12.90	69	4	5.79	14	4	28.57
1875.....	99	11	11.11	62	11	17.74	154	11	7.23	72	11	15.42
1876.....	113	14	12.38	85	14	16.47	195	14	7.17	110	14	12.72
1877.....	143	14	9.79	110	14	12.72	228	14	6.14	100	14	14.00
1878.....	156	15	9.61	132	15	11.36	284	15	5.28	138	15	10.87
1879.....	137	15	10.94	166	15	9.03	283	15	5.30	119	15	12.60
1880.....	147	13	8.84	186	13	6.98	311	13	4.18	131	13	9.92
1881.....	160	15	9.37	213	15	7.04	340	15	4.41	124	15	12.09
1882.....	175	20	11.42	237	20	8.44	391	20	5.11	151	20	13.24
1883.....	170	18	10.57	265	18	6.41	410	18	4.39	150	18	12.00
1884.....	163	21	12.88	289	21	7.26	423	21	4.96	141	21	14.89
1885.....	204	27	13.23	329	27	8.20	486	27	5.55	131	27	20.61
1886.....	213	17	7.98	410	17	4.14	568	17	2.99	157	17	10.83
1887.....	231	22	9.52	467	22	4.71	642	22	3.42	187	22	11.76
1888.....	217	36	18.58	506	36	7.11	672	36	5.35	213	36	16.90
1889.....	250	15	6.00	536	15	2.79	709	15	2.11	195	15	7.69
1890.....	288	30	10.41	578	30	5.19	802	30	3.74	196	30	15.30
1891.....	355	43	12.11	709	43	6.06	961	43	4.47	196	43	21.42
1892.....	339	67	19.76	827	67	8.10	1,104	67	6.06	250	67	26.80
1893.....	343	79	23.03	976	79	8.09	1,197	79	6.59	219	79	36.07
1894.....	274	73	26.64	1,021	73	7.15	1,252	73	5.83	205	73	35.61
1895.....	278	82	29.14	1,097	82	7.47	1,325	82	6.18	210	82	39.04

TABLE No. 27.

Number of men employed, kind of work done, and average per cent. of male patients employed.

MONTH.	DESCRIPTION OF WORK.											Total number employed.	Average daily population.	Per cent. employed.
	General.	Wards.	Dining-rooms.	Laundry.	Boiler-house.	Kitchen.	Printing.	Tailor shop.	Carpenter shop.	Painting.	Farm and garden.			
1894.														
October	13	37	34	18	9	....	4	1	....	2	8	126	521	24.18
November	14	40	35	18	9	4	4	2	....	2	5	133	522	25.47
December	14	44	39	18	9	1	4	2	....	2	6	139	525	26.47
1895.														
January	19	40	38	18	9	5	5	2	....	2	6	144	531	27.11
February	15	41	32	18	9	5	6	2	....	2	7	137	530	25.84
March	15	42	32	18	9	1	5	2	....	2	9	135	535	25.23
April	16	42	33	18	9	3	5	2	....	2	10	140	543	25.80
May	16	41	32	18	9	1	5	3	....	2	15	142	547	25.95
June	18	43	34	18	9	1	5	3	....	2	17	150	550	27.27
July	18	41	37	18	9	1	5	2	....	2	19	152	550	27.63
August	20	44	39	19	9	4	6	2	1	2	20	166	553	30.01
September	20	40	36	20	9	6	6	2	1	2	10	152	563	26.99

TABLE No. 28.

Number of women employed, kind of work done, and average per cent. of female patients employed.

MONTH.	DESCRIPTION OF WORK.					Total number employed.	Average daily population.	Per cent. employed
	General.	Wards.	Dining-rooms.	Laundry.	Sewing-Rooms.			
1894.								
October.....	32	19	32	6	34	123	534	23.03
November.....	42	20	32	6	34	134	543	24.67
December.....	39	18	32	6	32	127	548	23.17
1895.								
January.....	44	20	30	6	37	137	547	25.04
February.....	43	19	31	6	34	133	546	24.35
March.....	46	20	30	8	34	138	558	24.73
April.....	29	19	32	9	45	134	564	23.75
May.....	41	21	33	7	40	142	563	25.22
June.....	40	17	32	8	33	130	567	22.92
July.....	45	17	30	10	42	144	574	25.08
August.....	40	19	32	10	40	141	579	24.35
September.....	50	19	36	10	38	153	575	26.60

Bureau of Information.

This hospital receives patients under the same rules and terms of admission as govern other State hospitals.

The following is a brief epitome of laws relating to the insane passed since 1889:

Laws of 1890, Chapter 283.

An act to establish and organize the state commission in lunacy, and define its duties.

Laws of 1890, Chapter 126.

An act to promote the care and curative treatment of the pauper and indigent insane in the counties of this State, excepting New York, Kings and Monroe counties, and to permit said exempted counties to avail themselves of the provisions of this act when so desired. By this act, on October 1, 1893, the State assumed care of all pauper and indigent insane patients of all the counties of the State, with the exception noted above; the expense of the custody, care, maintenance, treatment, clothing, etc., not to be a charge on counties, but the cost of same to be paid out of funds provided by the State for the support of the insane. Under this act the State was divided into seven districts by counties: Sullivan, Orange, Rockland, Ulster, Richmond, Queens and Suffolk.

Laws of 1893, Chapter 323.

An act to amend chapter 126 of the Laws of 1890. The foregoing provisions of this act shall not apply to or include the Middletown State Homeopathic Hospital at Middletown, N. Y., so as to prevent public patients by or for whom homeopathic treatment is desired, being received by said homeopathic hospital from any of the counties of the State. Said hospital and

its officers are authorized and empowered to receive such public patients. County and State officers having authority to commit the insane may send all patients for whom homeopathic treatment is desired to the Middletown State Homeopathic Hospital, and the expense of conveying such patients to said hospital shall be a State charge, to be borne in the same manner as in the case of conveying other public patients to State hospitals.

The counties from which the Middletown Homeopathic Hospital received patients were reduced to four, namely: Orange, Sullivan, Ulster and Rockland.

Laws of 1892, Chapter 613.

An act to provide for the maintaining of State pauper insane patients not having any legal residence in any county of the State, and who are now or may hereafter become inmates of any of the State hospitals. The sum of \$2,000, or so much thereof as may be necessary, being appropriated to be paid by the Comptroller of the State upon vouchers rendered quarterly by the treasurer of each State institution.

Laws of 1893, Chapter 214.

An act to appropriate money for care, medical treatment, clothing, support and transportation to the State hospitals of the insane poor.

By this act there shall be imposed, for the fiscal year commencing October 1, 1893, a State tax of one-third of a mill, collected by annual assessment for above purpose.

By the provisions of this act, the medical superintendent of each State hospital shall on or before the fifteenth day of each month cause to be prepared by the steward thereof duplicate estimates in minute detail of expenses required. He shall submit one of same to the State Commission in Lunacy and retain the other. The Commission in Lunacy may revise said estimate and present the same to the Comptroller. The Comptroller shall then authorize the board of managers to make drafts on Comptroller as money may be required. It provides for a contingent

fund not to exceed \$1,000 ; it provides that the treasurer of each State hospital shall give bond ; it provides for a monthly meeting of the superintendents with the State Commission in Lunacy ; it provides the duties of the treasurer as follows :

He shall be custodian of all moneys received from Comptroller ; keep an accurate account of same, and shall only pay out such moneys on vouchers approved by executive committee of board of managers ; that he shall receive all moneys for care of private patients and other sources of revenue, and deposit such moneys in a bank designated by Comptroller, and send statement of same to Comptroller. It provides that the bank receiving such control shall give bond with the Comptroller ; it provides that the treasurer shall make monthly statements of receipts and expenditures, accompanied by the necessary vouchers ; it provides that each statement shall be verified by the treasurer and steward ; it provides that patients with no residence in the State shall be returned to the State in which they belong ; it provides that two agents may be appointed by the Commission in Lunacy, whose duty it shall be to secure from relatives and friends who may be liable therefor, or be willing to assume the cost of any such inmate as is being supported by the State.

Laws of 1895, Chapter 172.

An act which provides that managers of State hospitals may authorize the superintendent on his written certificate that patients have recovered to discharge patients, except when held on a court order. Also provides for discharge of patients not recovered, but whose discharge in the judgment of superintendent, will not be detrimental to the public welfare, and providing that friends or relatives of the patient are willing and financially able to receive and properly care for such patient after his discharge.

Laws of 1895, Chapter 381.

An act to protect human life. It provides for the construction, on the outside of all State hospitals over two stories high, iron stairways with suitable doorways leading thereto from each story.

Laws of 1895, Chapter 335.

An act to protect the lives of the inmates of public buildings of State institutions, and to protect such buildings against destruction by fire. It provides that the superintendent of each institution shall provide sufficient number of stand-pipes with connections or outlets on each floor, and with sufficient hose connection. Hose must be properly tested every three months under direction of the engineer. It provides for six portable fire extinguishers for each floor of each building, and that bath tubs shall be kept filled with water during the night. All fire escapes must be properly enclosed with wire netting. It provides for the regulation of the use of kerosene, lanterns, gas, and the storage of all inflammable material. It also provides for the cleanliness of all attics and basements, and the removal of all needless articles.

Laws of 1895, Chapter 693.

Providing that there shall be imposed for the fiscal year October 1, 1895, a tax of one mill on each dollar of real and personal property to be held by the State Treasurer for the following purposes: For expenses of State Commission in Lunacy; for maintenance of State hospitals, including payment of salaries of officers and wages of employes, which salaries and wages shall be uniform for similar grades of officers and employes in all State hospitals; it provides for contract for supplies, expenditures from contingent fund, repairs and additional accommodations; it provides that no patient shall occupy more than one room in any ward or building, and no patient be charged more than ten dollars per week for care and treatment. It also provides for appropriations, etc.

Laws of 1895, Chapter 824.

An act in relation to the appointment of a committee of the person and property of a lunatic, idiot or habitual drunkard.

Laws of 1895, Chapter 885.

An act which provides for the appointment, by board of trustees, of sufficient number of special policemen for protection of ground, buildings and patients.

The following sections of the laws of the State, and orders and recommendations of the commission, are given for general information:

Under section 7, chapter 283, Laws of 1889, we find that hereafter it shall be the duty of every physician who receives a certificate as a medical examiner in lunacy in this State to forward a certified copy thereof to the office of the commission within three days after such certificate is granted, and said commission shall cause the same certificate to be recorded as soon as received and shall promptly advise said physician of the recording thereof in writing. One year after the date of the passage of this act it shall not be lawful for any medical examiner in lunacy to make a certificate of insanity for the purpose of committing any person to custody unless his certificate has been so forwarded, and its record in the office of the commission, as above provided, has been acknowledged.

Relating to the Appointment of Medical Internes.

1. To provide for the appointment by State hospital superintendents of physicians who are graduates of not more than two years' standing, of a legally chartered medical college, such as is recognized by the University of the State of New York, such appointees to be known and designated as medical internes, the number of such medical internes not to exceed two in any one hospital.

2. No medical interne shall be permitted to remain in the service of any State hospital, as such, after the first civil service examination for the position of junior assistant physician, occurring subsequent to the expiration of one year's continuous service as such medical interne, unless he shall have passed said examination and been so certified by the Civil Service Commission.

Adopted by the New York Civil Service Commission April 28, 1893.

In Reference to the Commitment of Patients.

"No person shall be committed to or confined as a patient in any asylum, public or private, or in any institution, home or re-

treat for the care and treatment of the insane, except upon the certificate of two physicians, under oath, setting forth the insanity of such person." (Chapter 446, Laws of 1874).

According to section two of the same act "it shall not be lawful for any physician to certify to the insanity of any person for the purpose of securing his commitment to any asylum, unless such physician be of reputable character, a graduate of some incorporated medical college, a permanent resident of the State, and shall have been in actual practice of his profession for at least three years, and such qualifications shall be certified to by a judge of any court of record;" and it is now required that a certified copy of the same shall be filed in the office of the State Commission in Lunacy.

"No certificate of insanity shall be made except after personal examination of the party alleged to be insane, and according to forms prescribed by the State Commission in Lunacy, and every such certificate shall bear date of not more than ten days prior to such commitment. The date of examination shall constitute the date of the medical certificate in lunacy.

"Every such certificate of insanity, in every case, must have indorsed upon it the approval of a judge or justice of a court of record of the county or district in which the alleged lunatic resides, and said judge or justice may institute inquiry and proofs as to any alleged lunacy before approving or disapproving of such certificate, and may, at his discretion, call a jury in each case to determine the question of lunacy."

In the Matter of Services of Legal Processes Upon Insane Patients, and the Execution of Instruments by Them.

FORM 27.

STATE OF NEW YORK—STATE COMMISSION IN LUNACY.

At a special session of the State Commission in Lunacy, held at the capitol, in the city of Albany, on the second day of June, 1890.

Present.—Carlos F. MacDonald, M. D., president; Goodwin Brown, Henry A. Reeves, commissioners.

In the matter of the service of legal process upon insane patients and the execution of instruments by them.

Ordered:

1. (a) That the superintendent or officer in charge of each institution for the care and treatment of the insane be directed not to permit the service of any legal process whatever upon any insane patient except upon the order of a judge of a court of record, which shows that the judge had notice of the fact that the person sought to be served was at the date of the order an inmate of such institution.

That at the time the service of any process is made the following proceedings must be had:

The nature of the process, the date of the same, name of the court out of which it issued, and the date of its service must be entered in the history of the patient in the case-book.

That a certified copy of the order upon which the service is made and of the process to be served must be filed with the papers relating to the patient.

A copy of the process, together with an explanatory letter, must be forwarded at once to the committee of the person and property of the patient, if there be one, or, if there be no committee, then to the nearest known relative or next friend of such patient.

(b) That no insane person be permitted to sign any bill, check, draft, or other evidence of indebtedness, or to execute any contract, deed, mortgage or other legal conveyance, except upon the order of a judge of a court of record, which shows that the judge had notice of the fact that the person whose signature is sought to be obtained was at the date of the order an inmate of an institution for the care and treatment of the insane.

That at the time of the execution of the order the following proceeding must be had:

The medical superintendent, one of his assistants or the officer in charge must be present at the time of the execution of the order and must see that its terms are strictly complied with.

The substance of the order and the proceedings had thereunder must be entered in the history of the patient in the case-book.

A certified copy of the order must be filed with the papers relating to the patient, and a copy of the same, together with a notice of the proceedings had thereunder, must be forwarded at once to the committee of the person and property of the patient, if there be one, or, if there be no committee, then to the nearest known relative or next friend of the patient.

The original orders are required by statute to be filed with the clerk of the court.

2. That the medical superintendent or the officer in charge be directed to keep a copy of these orders posted conspicuously in the general reception room and office of each institution for the care and treatment of the insane.

By the commission:

[L. s.]

T. E. McGARR,
Secretary.

Ruling of Assistant Attorney-General for Post-Office Department, in Reference to Delivery of Mail to the Insane Confined in State Hospitals.

STATE OF NEW YORK—STATE COMMISSION IN LUNACY.

Carlos F. MacDonald, President; Goodwin Brown, Henry A. Reeves, Commissioners; T. E. McGarr, Secretary.

ALBANY, *March* 17, 1894.

To All Institutions for the Insane:

I am directed by the State Commission in Lunacy to transmit the following copies of letters recently received by the Commission from the Assistant Attorney-General of the Post-Office Department:

OFFICE OF THE ASSISTANT ATTORNEY-GENERAL
FOR THE POST-OFFICE DEPARTMENT,
WASHINGTON, D. C., *February 8, 1894.* }

T. E. McGARR, *Secretary State Commission in Lunacy, Albany, N. Y.*

Sir.—As per request made by Assistant Attorney-General Whitney, I have to inclose herewith a copy of the ruling referred to in the newspaper clipping presented by you, covering the position of mail matter addressed to prisoners confined in county jails, and awaiting trial upon indictment.

The specific case passed upon, wherein the question of the delivery of mail matter to insane persons was considered, has reference to a person certified to be non compos by several physicians and confined in a county asylum, but whose status as a sane person has not been passed upon by a court and jury.

As a general rule, it may be stated that if a person has been adjudged insane by a court of competent jurisdiction, by which a conservator or manager of his business, or a guardian of his person has been appointed, all mail matter addressed to such person should be delivered to such conservator, manager or guardian, or according to the latter's direction. In case a person be adjudged insane or an imbecile by a court, and he be confined in an asylum by order of a court, and there be no conservator or manager of his business, or guardian of his person lawfully appointed, then mail matter addressed to such person may be delivered to the keepers of the asylum.

The jurisdiction of the Post-Office Department as a carrier over such mail matter may be said to cease when such delivery is effected. Of course, it must be recognized that the authorities of such institutions are required to exercise a proper discretion in the matter of delivering mail to inmates, and in preventing the transmission of letters intended for delivery by such inmates to outside parties, especially so when the interests or recovery of patients might be endangered, or the safe administration of the affairs of the institution interfered with.

Very respectfully,

JOHN L. THOMAS,

Assistant Attorney-General P. O. Department.

In view of the foregoing, the previous order of the Commission relative to correspondence of patients (Form 40) is to be regarded as modified in these particulars:

1. Whenever an inmate of a State hospital or of an asylum has a guardian or committee of his or her person and estate, lawfully appointed, mail matter addressed to or by such inmate should be disposed of according to the written directions of such guardian or committee; and only in special or extraordinary cases need such mail matter be forwarded to the office of the Commission.

2. Whenever a lawfully adjudged and committed lunatic, who is an inmate of a hospital or asylum, has no guardian or committee lawfully appointed, mail matter addressed to such inmate and delivered, in pursuance of the foregoing direction of the Post-Office Department, to the keeper or superintendent of the hospital or asylum may, in the discretion of such keeper or superintendent, be delivered to such inmate unopened, if, in his judgment, it is safe to do so; or if he has a well-grounded reason to believe that to deliver such mail matter to such patient would be unsafe or unwise and prejudicial to the interests of such patient or of the institution, such keeper or superintendent may withhold such mail matter for examination and detention or destruction if deemed advisable, always having due regard to the prevailing rules as to the inviolability of mail matter and seeking to maintain it whenever it is practicable or proper to do so.

3. The "proper discretion" which hospital or asylum authorities may, in the opinion of the Post-Office Department, rightfully exercise as to preventing the transmission of mail matter addressed by an inmate to parties outside, should be exercised in good faith and with fair judgment, erring, if at all, on the side of a liberal view of each particular case. The Commission thinks that comparatively few letters of patients ought to be suppressed, and those only where the objection to transmission is clear and conclusive.

4. The direction in the original order (Form 40) as to forwarding unopened all documents or papers addressed to the officials

named therein must be strictly and promptly complied with in all cases.

5. Letters addressed by inmates of hospitals or asylums to parties outside, as to the propriety of forwarding which there is reasonable doubt, should be sent to the office of the Commission by the next mail, and not kept until a number of such letters has accumulated.

I am, very respectfully yours,

T. E. McGARR,

Secretary.

On receiving a patient the medical officers must inform said patient of the character of the institution, and the cause of detention.

Large bodies of visitors must be debarred from visiting the wards.

Directions for Conveying Patients to the Hospital.

FORM 112.

The attention of town and county officers is particularly called to the following order of the State Commission in Lunacy:

Ordered:

1. That all town, county or city authorities, before sending a patient to any State hospital, see that said patient is in a state of bodily cleanliness, and provided with the following clothing, to wit:

(a) One suit of underclothing.

(b) One suit of outer clothing, including headwear, boots and shoes.

Between the months of November and April, both inclusive, there shall be provided, in addition to the foregoing, a suitable overcoat for the men patients and a suitable shawl or cloak for the women patients; also gloves or mittens. Considering the great danger, always present, of the introduction of contagious or infectious diseases into institutions where large numbers of people are congregated, and to avoid, so far as possible, the in-

introduction of such disease by means of wearing apparel, the clothing above provided for must, in all cases, be new.

2. In traveling by rail patients must not be compelled to ride in smoking or baggage cars, except in the case of men patients who may be violent, profane or obscene, as to render their presence in ordinary passenger coaches offensive. If any portion of the route is necessary to be traversed by team, a covered conveyance should, unless impossible, be provided. The shortest practicable route should be selected, the hour of departure should be timed, so far as possible, so as to avoid the necessity of stopping over night on the journey, and so as not to reach the hospital at an unseasonable hour. Whenever practicable a notice in advance, by writing or telegraph, should be sent to the medical superintendent of the hospital of the coming of the patient. In cases of violent patients a sufficient number of attendants should be provided to control their actions without resorting to the use of mechanical restraints, such as straps, ropes, chains, handcuffs, etc.; quieting medicines should not be given to such patients except upon the prescription of a physician. If it becomes necessary to remain over night or for a number of hours at a station on the route, patients are not to be taken in jail, police station or lockup. Food in proper quantity and quality, and at intervals not exceeding five hours, should be provided for patients, but no alcoholic beverages must be given unless upon prescription of a physician. Opportunity must be afforded for attention to the calls of nature, and rules of decency must be observed. In case of the employment of extra attendants in conveying violent patients, care must be taken that they are of adult age and of good moral character. The provisions of the statute which require that a woman attendant shall accompany women patients when taken to State hospitals must be strictly complied with.

3. Any violations of the requirements of this order shall be promptly reported, so far as known to him, by the medical superintendent of the hospital to the State Commission in Lunacy.

Whenever possible two suits for winter and two for summer, together with several changes of underclothing, should be provided

for each private patient. Every patient should be brought by some one competent to give a history of the case as far as known. This is a matter too much neglected in the case of county patients.

The removal of a patient should never be attempted while he is laboring under severe bodily disease, such as fever, erysipelas, large or dangerous wounds or sores, consumption, pneumonia, meningitis, etc.

In this connection we cannot give better advice to the authorities having patients in charge than by quoting the following words of the late Dr. Gray, formerly of the Utica asylum, and one of the most justly distinguished and famous psychologists the country has ever produced:

“In conveying a patient to the asylum let it be done by force rather than by deception. Truth should not be compromised by planning a journey to the country, or a visit to the asylum, and when there suggesting the idea to the patient of staying while his admission was already decided upon; nor should patients be induced to come and stay a few days to see how they liked it, under the impression that they can leave at pleasure. Such treachery not only destroys confidence in friends, but also too often in us, by the seeming conspiracy to which we are supposed to be a party, than which there can scarcely be a greater barrier to improvement.”

Paroling Patients.

Friends sometimes request that patients may leave the hospital either to visit friends, or to go out on trial for a time. In such cases the superintendent is governed entirely by the following from an order of the State Commission in Lunacy:

Ordered:

1. “That no insane patient while in custody of an institution be permitted to go on parole, who, in the judgment of the medical superintendent, is homicidal, suicidal, destructive or dangerous either to himself or others.

2. “That no parole be granted for a greater period than thirty days, exclusive of the date thereof.”

History of Patients.

History blanks will be furnished to those wishing to send patients to this hospital, made out according to the form set forth in the body of the superintendent's report.

Form of Medical Certificates.

According to the form prescribed by the State Commission in Lunacy May 6, 1890, and by resolution of said commission of that date, ordered to go into effect July 1, 1890, under authority of chapter 446 of the Laws of 1874, and chapter 272 of the Laws of 1890.

Statement of facts to be made upon knowledge, information and belief by the examiners in lunacy. If any of the particulars in this statement be not known, the fact to be so stated.

1. Sex..... ; age.....years ; nativity (if foreign, how long in United States)..... ; color..... ; occupation..... ; single, married, widowed?.....

2. Number of previous attacks..... ; present attack began....., 18..*

(If the patient has ever been an inmate of an institution for the insane, state when and where, and whether discharged recovered or otherwise).....

3. Was the present attack gradual or sudden in its onset?.....

4. What is the bodily condition of the patient?.....

5. Is the patient subject to epilepsy?.....

6. Is the patient filthy or cleanly in dress and personal habits?.....

7. Is the patient violent, dangerous, destructive, excited or depressed, homicidal or suicidal? *(If homicide or suicide has been attempted or threatened it should be so stated)*.....

8. What is the supposed cause? *(State both predisposing and exciting cause)*.....

* Strike out the words not required.

9. Has the patient insane relatives, and, if so, state the degree of consanguinity, whether paternal or maternal?.....

10. What are the patient's habits as to the use of liquor, tobacco, opium, etc.?.....

STATE OF NEW YORK:

COUNTY OF..... }
City, Town or Village of } ss.:

We,....., a permanent resident of, county of, State of New York, and a permanent resident of, county of..... and State aforesaid, being severally and duly sworn, do severally certify, and each for himself certifies, with the exceptions which are hereinafter noted, as follows:

1. I am a graduate of an incorporated medical college, and a legally qualified examiner in lunacy; a certificate of my qualifications as such examiner, or a certified copy thereof, is on file in the office of the State Commission in Lunacy.

2. I have, with care and diligence, personally observed and examined, within five days prior to the date of this certificate, and more particularly did so on that date, namely, on the day of, 189 ,, a resident of, of the State of, and, as a result of such examination, find, and hereby certify to the fact, that said..... is insane and a proper person for care and treatment in some institution for the insane, as an insane person under the provisions of the statute.

3. I have formed the above opinion upon the subjoined facts, viz.:

(a) Facts indicating insanity personally observed by me as follows:

The patient said (*here state what was said to each examiner separately unless it was said in presence of both*)

The patient did (*here state what the patient did in presence of each examiner separately, unless it was done in presence of both*)

The patient's appearance and manner was.....

(b) Other facts indicating insanity, including those communicated to me by others, as follows:

(*State if there has been any change in the patient's mental condition and bodily health, and if so, what?*).....

4. That the answers to the questions contained in the statement are true to the best of my knowledge, information and belief.

....., M. D.

....., M. D.

Severally sworn and subscribed before me this day of 189.. }

STATE OF NEW YORK:

COUNTY OF }
City, Town or Village of } ss.:

I, a judge of..... which is a court of record, do on this..... day of....., 189.., hereby approve of the foregoing medical certificate of lunacy, the contents of the same having been certified to me under oath; and it being represented to me that it is intended to commit the said..... to*, for care and treatment.

Bond for Private Patients.

Form of agreement entered into by the person or sureties who become bond for the patient admitted:

(This agreement or understanding is generally signed by near

* Here state name of hospital, asylum, home or retreat.

relatives or legal guardians, if any such there be, at or prior to the time of admission of a patient, or subsequently upon the deposit of a sum of money sufficient to secure its execution.)

Whereas,....., of, in the county of, an insane person, has been admitted as a patient into the Middletown State Homeopathic Hospital, at Middletown, Orange county, N. Y.

Now, therefore, we, the undersigned, in consideration thereof jointly and severally bind ourselves to the Middletown State Homeopathic Hospital, at Middletown, Orange county, N. Y., to pay the sum of dollars and cents per week for the care and board of said insane person so long as shall continue in said hospital, with such extra charges as may be occasioned by h.... requiring more than ordinary care and attention, and also to provide h.... with suitable clothing and to pay for all such necessary articles of clothing as shall be procured for h.... by the steward of said hospital, and to remove h.... from the hospital whenever the room occupied by h.... shall be required for a class of patients having preference by law, or whenever shall be required to be removed by the trustees or superintendent, and also to pay all the expenses incurred by sending said patient to h.... friends, in case one or either of us shall fail to remove said patient when required to do so as aforesaid, and if.....shall be removed at the request of h.... friends before the expiration of one calendar month after reception, then to pay board for four weeks, with such expenses as may have been incurred, unless....shall be sooner cured; and also to pay not exceeding fifty dollars for all damage..... may do to the furniture or other property of said hospital during any one month, and for reasonable charges in case of elopement, and funeral charges in case of death; and also to pay all expenses, costs, fees and charges to which the said corporation may be subjected for or upon account of any proceeding under a writ of habeas corpus or other proceedings in relation to the custody of said patient, or appearing or defending said proceedings, or in producing the patient before any court or judge therein; all such

payments to be made quarterly on the first days of March, June, September and December in each year, and at the time of removal, with interest on each bill from and after the time it becomes due.

In witness whereof we have hereunto set our names, this.....
day of, in the year 18....

(Name)

(Post-office address).....

(Name)

(Post-office address).....

This will certify that I am personally acquainted with.....
..... and
the signers, for the prompt discharge of its obligations.

(Name)

(Post-office address)

Further Requirements.

Section 6 of chapter 126, Laws of 1890, providing among other things that the president of the State Commission in Lunacy may require State hospitals to send trained attendants of said hospitals to bring insane patients from their homes or from poorhouses to said hospital, and it appearing that the public interests will be best subserved by bringing such patients to State hospitals in such manner, by reason of the greater economy, better care and more humane treatment of the patients; it is is, therefore,

Ordered:

1. The authorities of each State hospital are hereby directed to send such number of trained attendants as may be necessary to transfer patients supported at public expense from their homes or from poorhouses, as the case may be, to said State hospitals.

2. All transfers of insane patients, as provided by this order, must be made in conformity with the rules prescribed in the order of the commission dated December 1, 1892, and known as Form 112.

3. Patients supported at public expense shall be transported only by such public officers as are herein named, but relatives or

friends may transfer or accompany such patients at their own expense.

4. This order shall be in effect on and after October 1, 1893.

Visiting Days.

The friends of patients are admitted to visit the institution and its inmates every day from 1 to 4 p. m., excepting legal holidays, Saturdays, Sundays and Monday mornings.

The above rule must not be varied, except by special permission from the medical superintendent.

All correspondence relative to patients should be addressed to Dr. Selden H. Talcott, superintendent, Middletown, Orange county, N. Y.

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